



User Manual

Model: FI9853EP

Outdoor HD IP Camera



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Security Warning

Safeguarding Your Privacy

Foscam cameras require good security practices to safeguard your privacy. You can help protect your camera by changing the default username and/or password. Input a username and/or password that is at least 8 – 10 characters or longer. Try to use a combination of lower-case and upper-case letters as well as numbers and special characters. The more complex the username and password, the harder it will be to guess by an unauthorized user.

You should update your camera regularly at <http://www.foscam.us/firmware.html>. Make sure your camera has the latest firmware installed for your specific camera model. The latest firmware for Foscam cameras utilizes protection against various types of online hacking, cracking, and unauthorized access. Doing so will make your device more secure, may add features, and will contain bug fixes to make your device work faster.

1 Overviews

FOSCAM FI9853EP is an integrated IP Camera with a color CMOS sensor enabling viewing resolution 1280*720. It combines a high quality digital video camera, with a powerful web server, to bring clear video to your desktop from anywhere on your local network or over the Internet.

FI9853EP supports the industry-standard H.264 compression technology, drastically reducing file sizes and conserving valuable network bandwidth.

The IPCAM is based on the TCP/IP standard. There is a WEB server inside which could support Internet Explore. Therefore the management and maintenance of your device is simplified by using the network to achieve the remote configuration and start-up.

The camera is designed for outdoor surveillance applications such as courtyards, supermarket, and school. Controlling the IPCAM and managing images are simplified by using the provided web interface across the network.

FOSCAM provides Phone APPs for Android and iPhone users, please search “**Foscam Viewer**” and install it through APP Store, then you can view your camera directly as a computer.

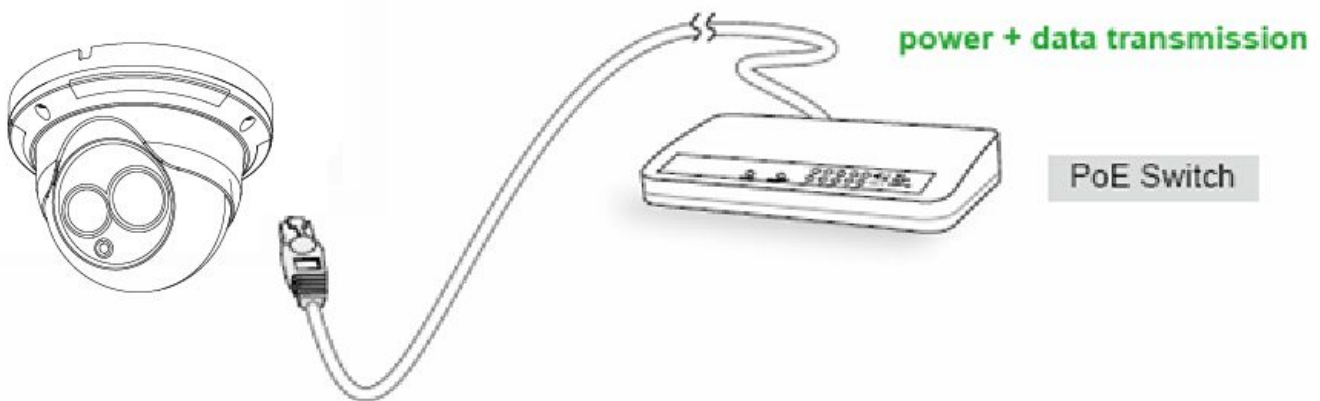
1.1 Key Features

- ◆ Standard H.264 video compression algorithm to satisfy the transmission of high definition video in narrow bandwidth network

- ◆ 1.0 Mega-Pixel
- ◆ Supports IE/Firefox/Google/Safari browser or any other standard browsers
- ◆ Supports WEP,WPA and WPA2 Encryption
- ◆ IR night vision (Range:20m)
- ◆ Supports image snapshot
- ◆ Supports dual-stream
- ◆ Supports IR-Cut and the filter change automatically
- ◆ Embedded FOSCAM DDNS(dynamic domain name service) Service
- ◆ Supports remote viewing & record from anywhere anytime
- ◆ Multi-level users management with password protection
- ◆ Motion detection alert via email or upload image to FTP
- ◆ Supporting Third Party Domain name
- ◆ Providing Phone APPs for Android and iPhone users
- ◆ Supports multiple network protocols: HTTP /HTTPS/ RTSP/ TCP /IP /UDP /FTP /DHCP /DDNS / UPNP /ONVIF
- ◆ Providing Central Management Software to manage or monitor multi-cameras

1.2 PoE (Power over Ethernet)

The Network Camera is PoE-compliant, allowing transmission of power and data via a single Ethernet cable. Such as the following picture: connect the Network Camera to a PoE-enabled router/ switch via Ethernet cable.



1.3 Read Before Use

Please first verify that all contents received are complete according to the Package Contents listed below. Before the Network Camera is installed, please carefully read and follow the instructions in the Quick Installation Guide to avoid damage due to faulty assembly and installation. This also ensures the product is used properly as intended.

1.4 Packing Contents

• IPCAM×1	• CD×1
-----------	--------

• DC Power Supply×1	• Quick Installation Guide ×1
• Network Cable×1	• Security Warning Card × 1

1.5 Physical Description

1.5.1 Front Panel



- 1 Infrared Lamp Array
- 2 LENS: CMOS sensor with fixed focus lens
- 3 Induction IC

1.5.2 Interface



1 Power Interface

Connect the external power adapter, request for 12V/1A power.

2 LAN

10/100M adaptive Ethernet interface. Through this interface, IPCAM can be connected with various network devices, such as hub, router, etc.

3 Reset button

Press and hold on the reset button for 5 seconds. Releasing the reset button, the password will back to the factory default administrator password. The default administrator user is admin with no password.

1.5.3 Bottom View

There are two labels located of the camera; this is an important feature of original Foscam cameras. If your camera does not have labels, it may be a clone. Cloned Foscam cameras can not use original firmware and are not eligible for warranty or technical services.

1.5.4 SD Card

The record files of the IPC can be stored in the SD Card.

You need open the IP Camera, then plug the SD card into SD card slot inside the IP Camera.

When you plug in the SD card during the camera work process, please reboot the camera again, or else the SD Card may be cannot work well.

2 Accessing the Network Camera

This chapter explains how to access the network camera through web browsers and RTSP players.

2.1 Access the Camera in LAN

This camera support HTTP and HTTPS protocols, so here will allow you to use HTTP and HTTPS port no.

(1) Http:// LAN IP + Http Port no.

Double click the IP Camera Tool icon and it should find the camera's IP address automatically after you plug in the network cable.

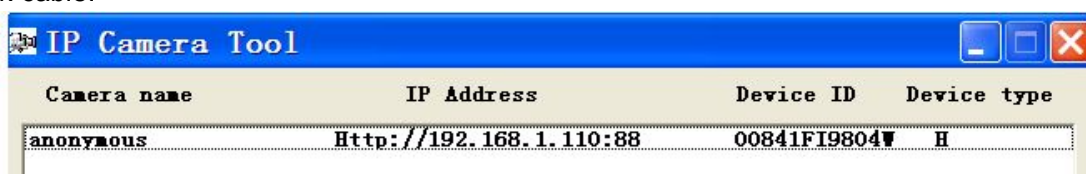


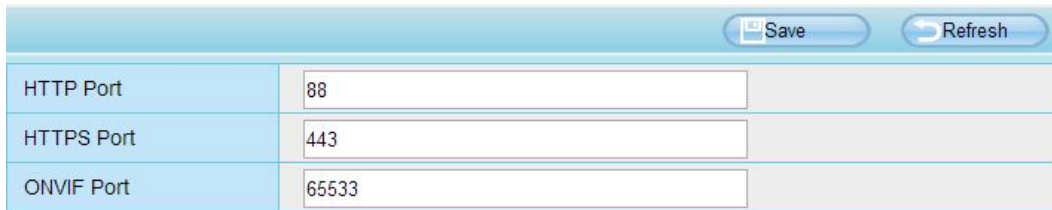
Figure 2.1

Double click the IP address of the camera; your default browser will open to the camera login page.

(2) Https:// LAN IP + Https Port no.

The default Https port no. is 443. You can use the url to access the camera: **https:// LAN IP + HTTPS port.**

Go to **Settings - Network - Port** panel, you can see and change the https port no.



Save Refresh	
HTTP Port	88
HTTPS Port	443
ONVIF Port	65533

Figure 2.2

2.2 Access the Camera in WAN

2.2.1 Static IP Addresses

Users who have static IP addresses do not need to set DDNS service settings for remote access. When you have finished connecting the camera using the LAN IP address and port forwarding, you can access the camera directly from the Internet using the WAN IP address and port number.

How to Obtain the WAN IP address from a public website

To obtain your WAN IP address, enter the following URL in your browser: <http://www.whatismyip.com>. The webpage at this address will show you the current WAN IP.



Figure 2.3

Access your IP Camera from the Internet

You can access the IP Camera from the Internet (remote access). Enter the WAN IP address and port number in your standard browser. For example, you would enter **http:// 183.37.28.254:85**

NOTE:

Make sure port forwarding is successful. You can do port forwarding two ways.

- 1) Login to your router to enable the “UPnP” function. You can then login to the camera as administrator, choose **Network**, and then choose **UPnP** to enable UPnP. Make sure that the status of UPnP reads “UPnP Successful” on the Device Status page.
 - 2) Do port (HTTP port) forwarding manually.
- If your router has a Virtual Server, it can do port forwarding. Add the camera’s LAN IP and port which you had set earlier to your router’s port forwarding settings.

NOTE:

If you plug the camera into a router, it will have a dynamic IP address and you need to set DDNS service settings to view it remotely.

Step 1: Enter the username and password of the Administrator (default username is admin with a blank password), and click “OK” to apply changes.

Step 2: Wait around 10 seconds, you’ll see that the camera’s LAN IP address has changed. In our example it was changed to 2000, so we see http://192.168.8.102:2000 in IP Camera Tool. Also, the LAN IP address is now fixed at a static IP address of http://192.168.8.102:2000. This IP address will not change even if the camera is powered off and back on, the camera will remain on this LAN IP address. This is very important that a static LAN IP address is set, or you may have problems later with remote access and seeing the camera remotely if the camera loses power and reconnects on a different LAN IP address. Make sure you set a static LAN IP address!

2.2.2 Dynamic IP Addresses

DDNS is a service that allows your IP Camera, especially when assigned with a dynamic IP address, to have a fixed host and domain name. This means that even though your WAN IP address is constantly changing, you will have a fixed hostname you can use to access your cameras at all times. You can access the camera directly from the Internet using the hostname and port number.

What is the HTTP Port no.?

1) Default HTTP Port is 88

All cameras have the default HTTP port of 88. For example, if the LAN IP link of the camera is http://192.168.8.102:88, this means that the camera’s HTTP port is 88. You can change port 88 to another port if you’d like such as 2000 or 8090, which will not be conflict with other existing ports like 25, 21, 10000. Here you can set the port no. between 1 and 65535.

2) Change the default http no.88 to another one.

How to assign a different HTTP Port No. and fixed the LAN IP of the camera by the IP Camera Tool?

Step 1: Open the IP Camera Tool, select the camera you would like to change the port of, right click on the IP address, and click on “Network Configuration”, this brings up the network configuration box as shown in Figure 2.4 and 2.5.

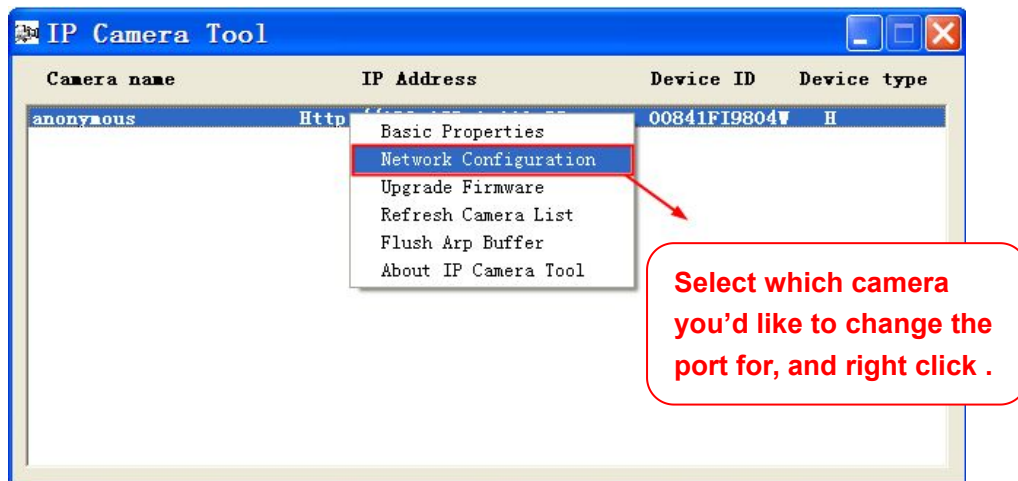


Figure 2.4

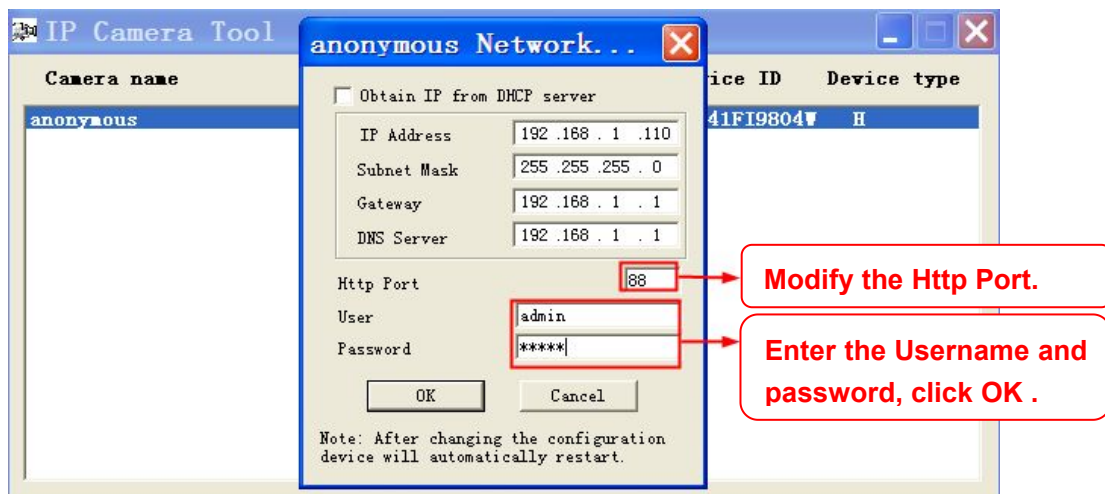


Figure 2.5

Step 2: Modify the Http Port and enter the username and password of the Administrator , and click “OK” to apply changes.

Step 3: Wait around 10 seconds, you'll see that the camera's LAN IP address has changed. Also, the LAN IP address is now fixed at a static IP address of http://192.168.1.110:88. This IP address will not change even if the camera is powered off and back on, the camera will remain on this LAN IP address. This is very important that a static LAN IP address is set, or you may have problems later with remote access and seeing the camera remotely if the camera loses power and reconnects on a different LAN IP address. Make sure you set a static LAN IP address!

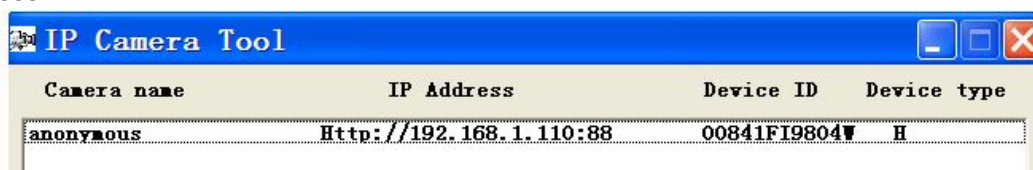


Figure 2.6

What is Port forwarding?

If you have never done port forwarding before, you can open and view the following link to understand the basic concept. Port forwarding allows for outside connections to access a specific device on your network from anywhere in the world. Every router automatically blocks any incoming connections for safety purposes. Using port forwarding, you are telling your router to allow a connection through a certain port (you can think of it as a gateway) into your router. You set this port to a specific device, in our case an IP Camera, so it can be accessed from anywhere in the world.

Click this link to learn more about port forwarding: <http://portforward.com/help/portforwarding.htm>

How do we configure Port Forwarding?

For this section, we will be using an example:

Let's say the camera's LAN IP address is <http://192.168.8.100:2000>

Step 1: Login to the router, and go to your router's port forwarding or port triggering menu. Sometimes this is also under the name of Virtual Server or NAT.

Using the Linksys brand router as an example, we would log into the router, and go to the Applications & Gaming menu. We would then click on the "Single Port Forwarding" sub-menu.

Step 2: Create a new column using the LAN IP address & HTTP Port of the camera within the router as shown below, then push OK or Submit to save your settings:

Wireless-N Home Router WRT120N

Applications & Gaming

Single Port Forwarding

Application Name

None

None

None

None

None

Foscam Cam

Assign a name for the port forward setting here

External Port	Internal Port	Protocol	To IP Address	Enabled
---	---	---	192.168.8.---	<input type="checkbox"/>
---	---	---	192.168.8.---	<input type="checkbox"/>
---	---	---	192.168.8.---	<input type="checkbox"/>
---	---	---	192.168.8.---	<input type="checkbox"/>
---	---	---	192.168.8.---	<input type="checkbox"/>
2000	2000	Both	192.168.8.100	<input checked="" type="checkbox"/>
		Both	192.168.8.---	<input checked="" type="checkbox"/>
		Both	192.168.8.---	<input type="checkbox"/>

Fill the HTTP Port of the camera in the columns of External Port and Internal Port. Example: 2000

Fill in this section with the LAN IP of the camera; we would enter "100" for our example.

Figure 2.7

First method :

Use the embedded DDNS to access the camera via the Internet

Each Foscam camera has an embedded unique DDNS domain name, the format of this domain name is xxxxxx.myfoscam.org. On the bottom of the camera, you can see the domain name sticker with this information on it.

For example, we can use test09.myfoscam.org. In the camera, click Settings at the top, click "Network" on the left, then click "DDNS" to get to the DDNS settings page. Here you can see the unique domain name of your camera.

Figure 2.8

Now you can use “[http://Domain name + HTTP Port](http://test09.myfoscam.org:2000)” to access the camera via the Internet. Take hostname test09.myfoscam.org and **HTTP Port of 2000** for example, the URL link to access the camera via the Internet would be [http:// test09.myfoscam.org:2000](http://test09.myfoscam.org:2000).

Second method :

Use the Third party DDNS to access the camera via the Internet

Step 1, Please go to the third party DDNS website(such as www.no-ip.com) to create a free hostname.

Step 2, DO DDNS Service Settings within the Camera

Please set **DDNS Settings** within the camera by **hostname**, a **user name** and **password** you’ve got from www.no-ip.com

Take **hostname** ycxgwp.no-ip.info, **user name** foscam, **password** foscam2012 for example.

Firstly, goes to option of **DDNS Settings** on the administrator panel.

Secondly, select No-Ip as a server.

Thirdly, fill foscam as DDNS user, fill password foscam2012 as DDNS password, fill ycxgwp.no-ip.info as DDNS domain and server URL, Then click save to make effect. The camera will restart and to take the DDNS settings effective.

Fourthly, after the restart, login the camera, and go to option of **Device Status** on the administrator panel, and check if the DDNS status is successful.

If failed, please double check if you have input the correct hostname, user name, and password, and try to redo the settings.

NOTE:

If you have set Third Party DDNS successfully ,the Foscam Domain Name will be invalid. The Third Party DDNS and the Foscam Domain Name cannot work at the same time, the last time you configured will take effect.

2.3 Using the VLC player

This camera supports RTSP streaming, here you can view the camera using VLC player.

RTSP URL [rtsp:// \[user name\]:\[password\]@IP:HTTP port number/videosream](rtsp://[user name]:[password]@IP:HTTP port number/videosream)

The part in the square brackets may be omitted.

user name & password:

The user name and password to access the camera. This part can be omitted.

IP: WAN or LAN IP address.

Videostream:

Here support some mode: When the network speed is bad, here you had better select videoSub.

For example:

IP: 192.168.1.11

HTTP Port number: 88

User name: admin

Password: 123

Here I can enter one of the following URLs in the VLC.

- 1) `rtsp://admin:123@192.168.1.11:88/videoMain`
- 2) `rtsp:// @192.168.1.11:88/videoMain`
- 3) `rtsp://:123@192.168.1.11:88/videoMain`
- 4) `rtsp://admin@192.168.1.11:88/videoMain`

Open the VLC, and go to Media→Open Network Stream option, then enter the URL into VLC.

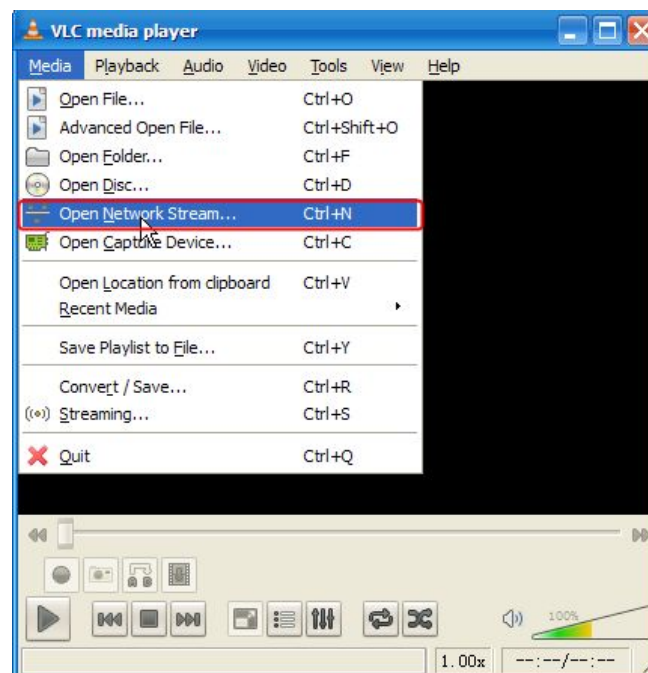


Figure 2.9

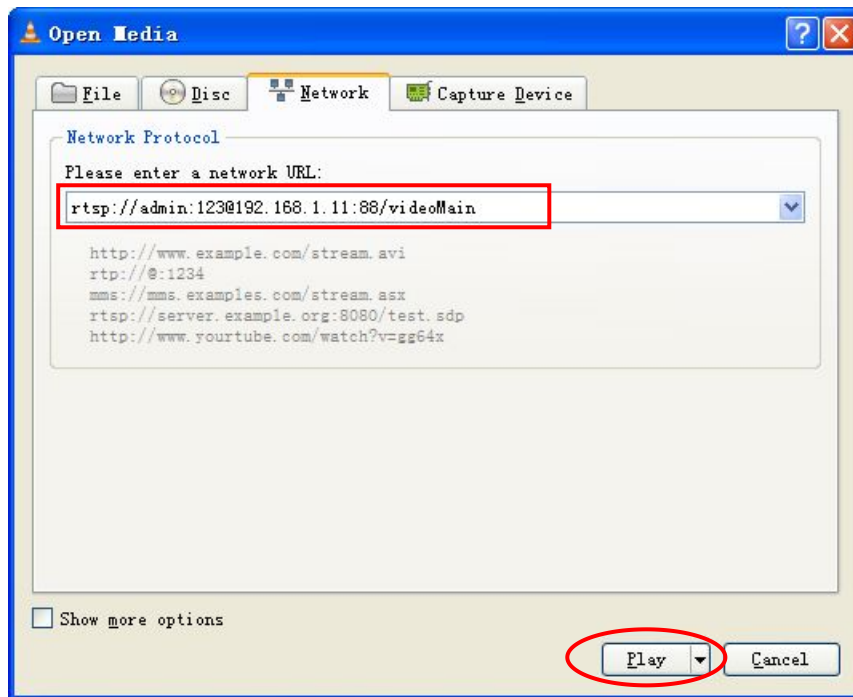


Figure 2.10

Sometimes you may need to enter the user name and password again. Click OK and you can see the real-time preview.



Figure 2.11

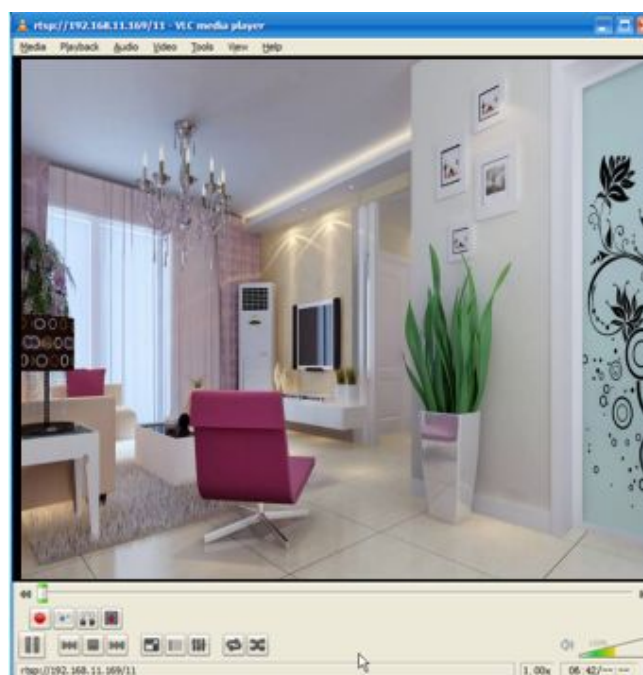


Figure 2.12

If you cannot play the video in the VLC player, please check the port mapping. You can read Quick Installation Guide about How to configure port forwarding.

NOTE:

If you modify the camera's username or password, you had better reboot the camera, or else the new username and password cannot take effect when you enter the authentication in the VLC.

2.4 IP camera connection to the server

Device supports ONVIF 2.2.1 protocol, You can easily access the NVR with ONVIF or server with ONVIF.

3 Surveillance Software GUI

Please refer to the Quick Installation Guide if you install the camera at first time. After finishing quick installation, you can take time to learn the operation of the software.

3.1 Login Window

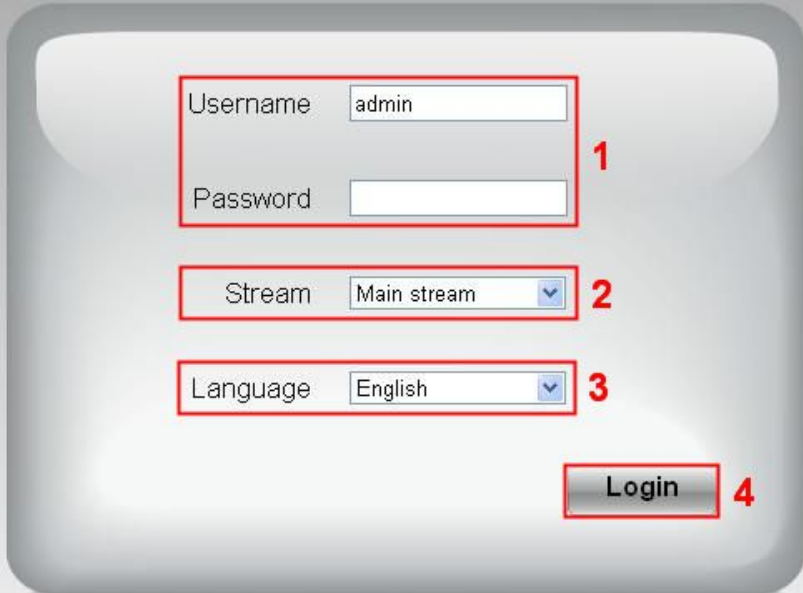
The image shows a login window for the Foscam surveillance software. It has a light gray background with rounded corners. There are four main sections highlighted with red boxes and numbered 1 through 4. Section 1 contains 'Username' and 'Password' text boxes; 'Username' has 'admin' entered. Section 2 contains a 'Stream' dropdown menu with 'Main stream' selected. Section 3 contains a 'Language' dropdown menu with 'English' selected. Section 4 is a 'Login' button. The numbers 1, 2, 3, and 4 are in red and placed to the right of their respective sections.

Figure 3.1

Please check the login window above, it was divided to 4 sections from no. 1 to 4.

Section1 Enter the Username and password

The default administrator username is admin with no password, please reset the password at first using and prevent unauthorized users login the camera .

Section2 Stream

The camera supports two stream modes: Main stream and Sub stream. If you want to access the camera from LAN, here you can select Main stream. If you want to access the camera from Internet, here we recommend Sub stream.

NOTE:

When the network bandwidth is badly you'd better select Sub Stream and the video will be more fluency.

Section3 Select the language

You can select the language you need via click on the language drop-down list to switch.

Section4 login the camera

Click "Login" button.

NOTE:

When setting up your camera for the first time, it will request that you modify the default username and/or password if both are still set to default. Input the new username and password, click "Modify" to complete the modification. You will now use the new username and password to login the camera in the future.

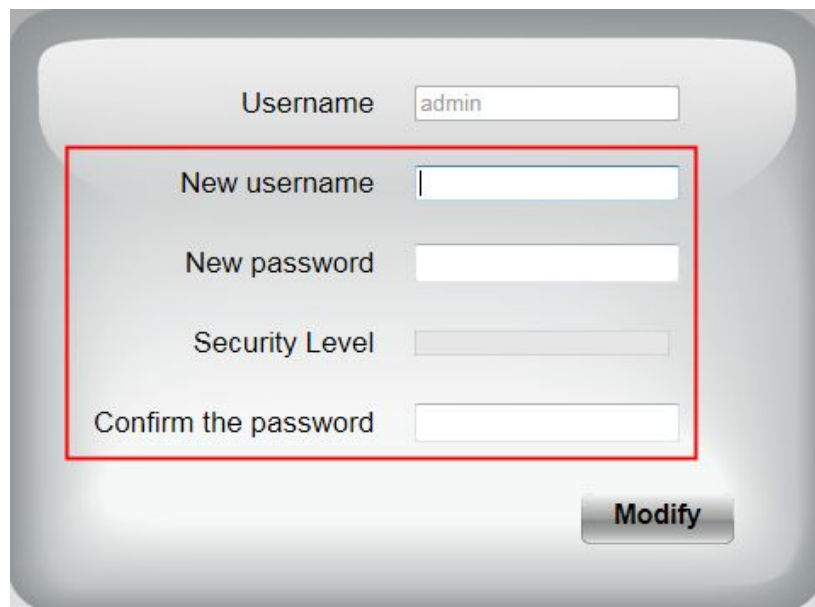


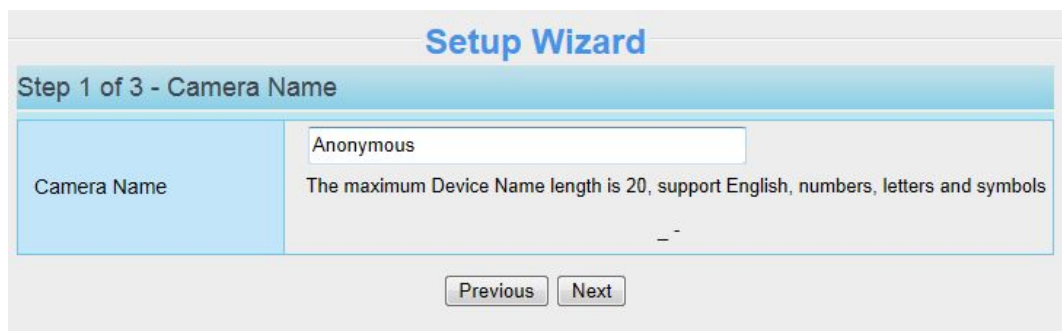
Figure 3.2

After logging in for the first time, you will go to "Setup Wizard" automatically. Here you can set the basic parameters of camera, such as camera name, camera time, IP configuration.



Figure 3.3

Device Name: You could give name for your camera.



Setup Wizard

Step 1 of 3 - Camera Name

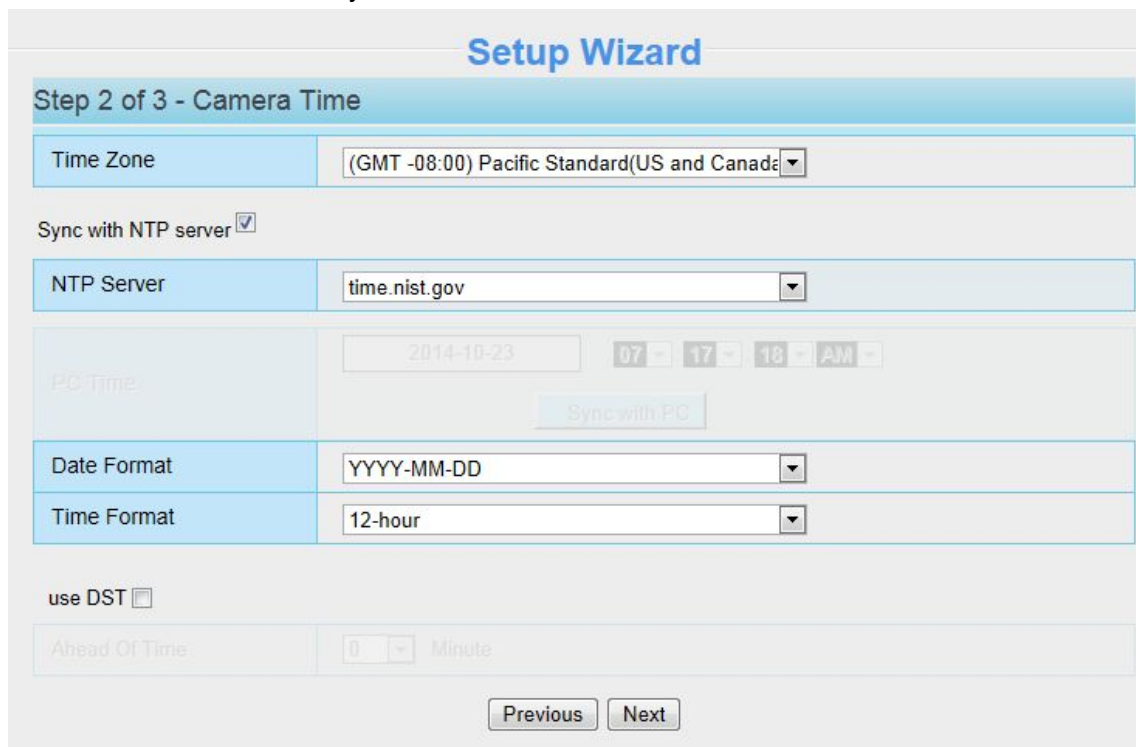
Camera Name: Anonymous

The maximum Device Name length is 20, support English, numbers, letters and symbols

Previous Next

Figure 3.4

System Time: Select the time zone you need to set the date, time, format, etc.



Setup Wizard

Step 2 of 3 - Camera Time

Time Zone: (GMT -08:00) Pacific Standard(US and Canada)

Sync with NTP server ☒

NTP Server: time.nist.gov

PC Time: 2014-10-23 07:17:18 AM

Sync with PC

Date Format: YYYY-MM-DD

Time Format: 12-hour

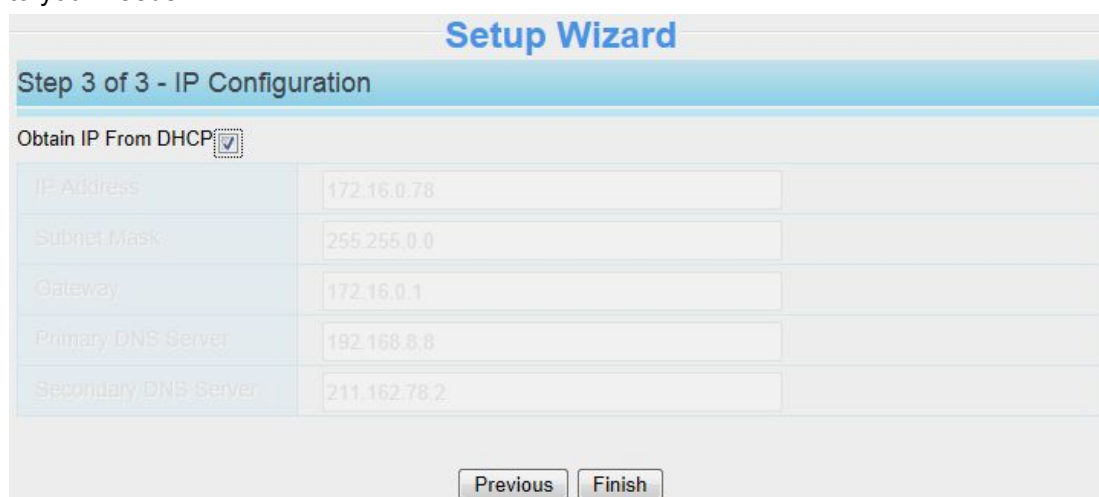
use DST ☐

Ahead Of Time: 0 Minute

Previous Next

Figure 3.5

IP: Set IP address of the camera. You could choose to obtain an IP automatically or set the IP address according to your needs.



Setup Wizard

Step 3 of 3 - IP Configuration

Obtain IP From DHCP ☒

IP Address	172.16.0.78
Subnet Mask	255.255.0.0
Gateway	172.16.0.1
Primary DNS Server	192.168.8.8
Secondary DNS Server	211.162.78.2

Previous Finish

Figure 3.7

NOTE:

It needs about 1 minute to connect the camera to your router.

3.2 Surveillance Window



Figure 3.8

Section1 FOSCAM Logo/ Live Video / Settings buttons

FOSCAM: FOSCAM LOGO

LiveVideo: Path to surveillance window. Click this button and back to the surveillance window

Settings: Path to Administrator Control Panel, Click it, and it will lead to Administrator Control Panel and do advanced settings.

Playback: Click this button and back to the Playback panel to view the record files stored in the SD Card.

Section2 Multi-Device Window



The firmware inside the camera supports up to maximum of 9 cameras being monitoring at the same time. You

can add other cameras in multi-camera panel (read chapter 4.3.4).

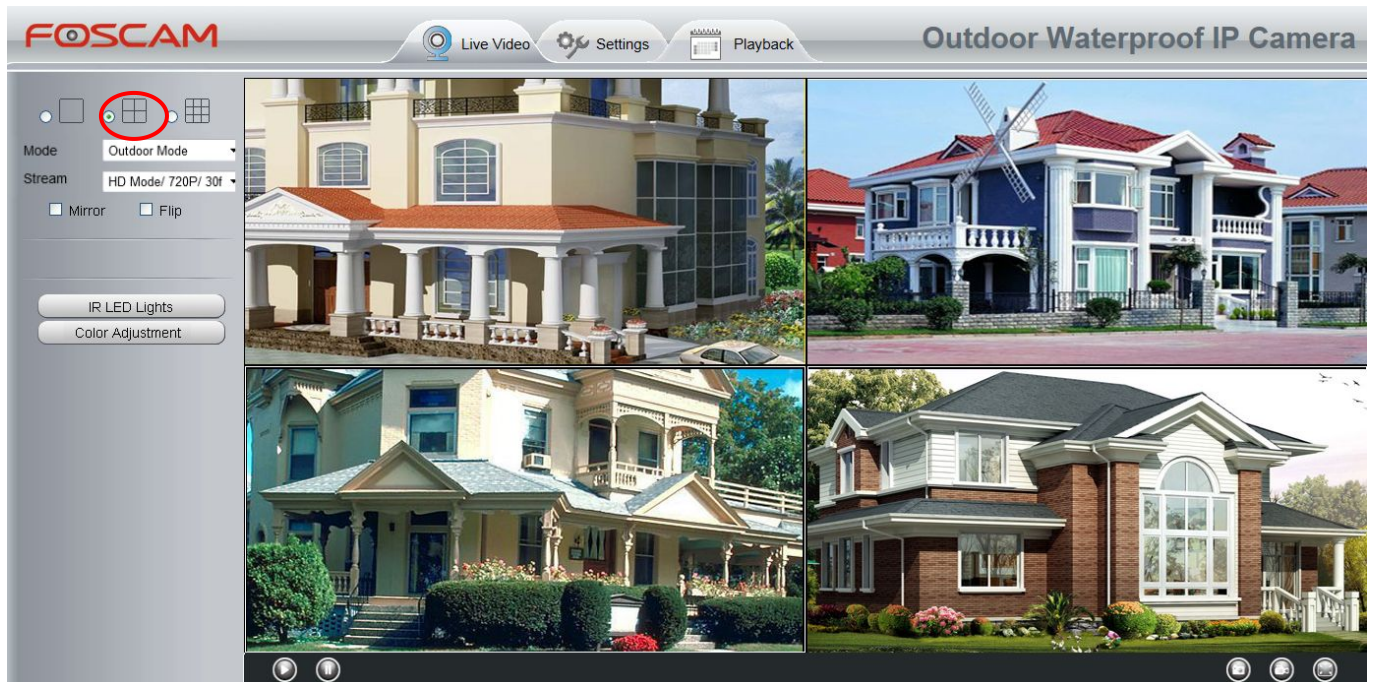


Figure 3.9

Section3 Mode/ Stream / Mirror/ Flip buttons

Mode

- 1) 50HZ -----Indoor surveillance (Region: Europe, China)
- 2) 60HZ -----Indoor surveillance (Region: USA, Canada)
- 3) Outdoor Mode-----Outdoor surveillance

Stream

The default stream supports multiple modes, For example: HD Mode/720P/30fps/2M meanings: **Stream type / Resolution / Maximum frame rate/ Bit rate**.

1) **Stream type** : It is used to identify the stream type.

2) Resolution

The lowest resolution is QVGA. The bigger the resolution, the better of the image quality is. If you are accessing the camera via internet and want to get more fluent video streaming, please select resolution VGA.

3) Maximum frame rate

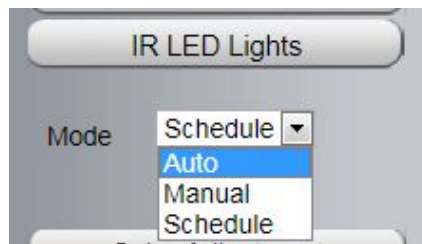
When the video format is 50Hz, the maximum frame rate is 25 fps. When the video format is 60Hz, the maximum frame rate is 30 fps. You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.

4) Bit rate

Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video cannot play well.

You can reset the stream type on **Settings-> Video-> Settings** panel.

Section4 IR LED Lights



Click Infra led and there are three modes to adjust the infrared led: Auto, Manual and Schedule.

Auto: Select it and the camera will adjust the infra led (on or off) automatically.

Manual: Select it and turn off the infra led manually.

Schedule: Select it and the IR led light will be off at the schedule period. If you want to define or change the IR led lights schedule time, please go to **Settings→Video→IR LED Schedule** page.

Section5 Image quality settings

In this page, you can tune Hue, Brightness, Contrast, Saturation, and Sharpness to get higher quality.



Section6 OSD

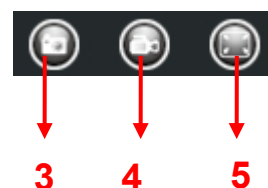
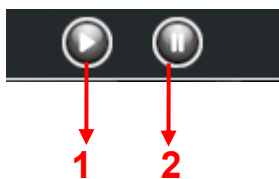
If you have added time and camera name in the video, you can see it in the live window.

Go to **Settings ---Basic settings---Camera name** panel, and you can change another device name. The default device name is anonymous.

Go to **Settings ---Basic settings---Camera time** panel and adjust the device time.

Go to **Settings ---Video---On Screen Display** panel, you can add or no add OSD.

Section7 Play/Stop/ Snap/ Record/ Full screen button




1-----Play Click it to play the video of the camera

2-----Stop Click it to stop the video of the camera

3----- Snap: Click it to make snapshot and it pop up a window which picture you snapshot, right click in the

window and save the picture to anywhere you want.

4----- Record: Click the icon  and the camera start recording, you can see a green dot in the live window. Click again and stop recording. The default storage path is C:\IPCamRecord. You can change the storage path: Go to **Settings- >Record-> Storage Location** panel.

5-----Full Screen Click it to make full-screen, or you can double click the surveillance screen to make full-screen. Double click again and exit full-screen.

Onscreen Mouse Control

Right click the mouse and you can adjust the screen ration, full screen and Zoom up.



Figure 3.10

Keep ration: Select it and the camera will adjust the size of live window based on the computer monitor automatically.

Sometimes there is a black border around the video , please select **Keep ration** to get a better visual quality .

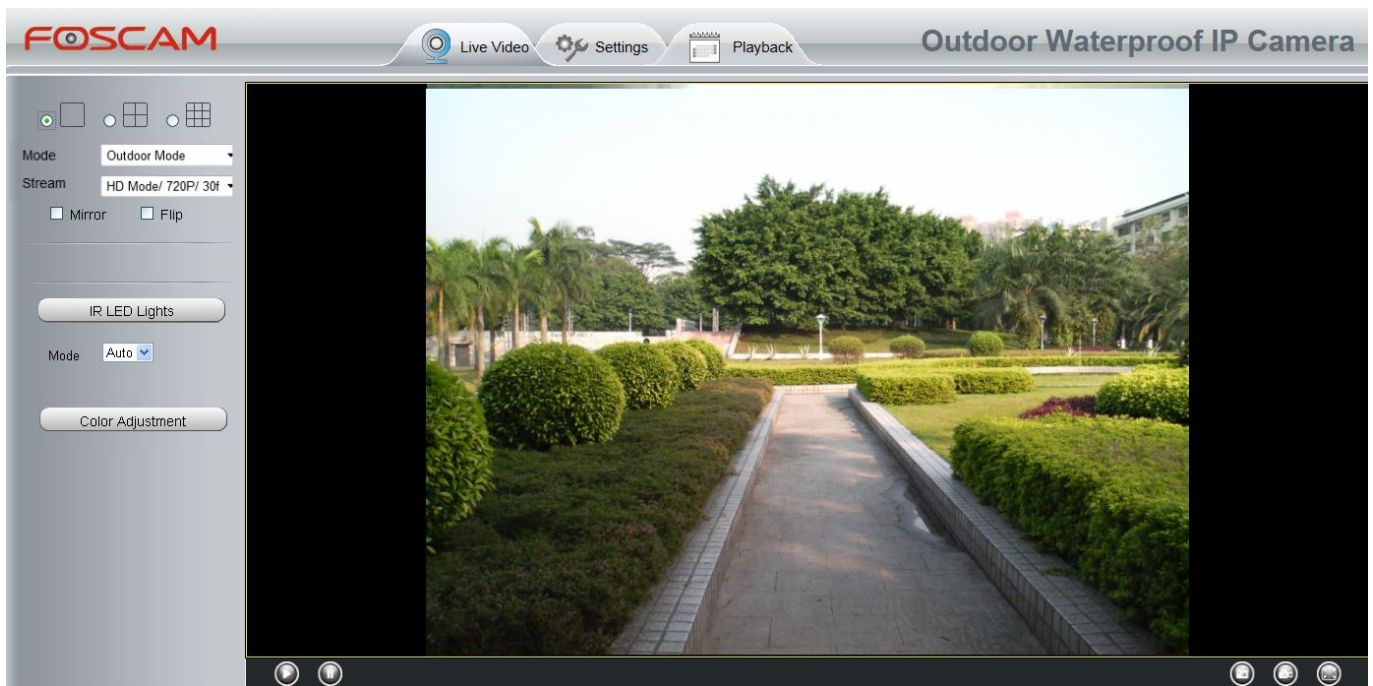


Figure 3.11

Full Screen: Select it and Click it to make full-screen, press ESC and exit full-screen.

Zoom up/down: Click it and the live view will be digital zoomed up, then click Zoom Down and the live view back to original size.



Figure 3.12

NOTE:

1 This camera don't support Pan/Tilt function, so here cannot allow to use Screen PTZ.

2 For Mac OS, the plugin cannot support Onscreen Mouse function, so you cannot allow to use it.

4 Advanced Camera Settings

Click the button “**Settings**”, goes to Administrator Control Panel to make advanced camera settings.

4.1 Setup Wizard

The way to set it, you could refer to section 3.1.

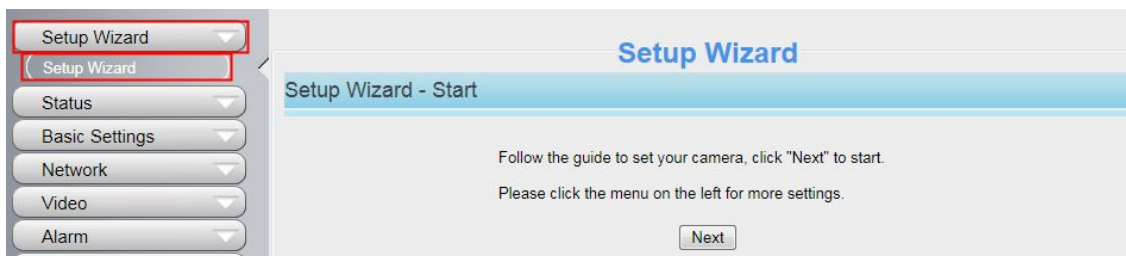


Figure 4.1

4.2 Device Status

Device Status contains four columns: Device Information, Device Status, Session Status and Log, it will show you various information about your camera.

4.2.1 Device Information

Device Information	
Refresh	
Camera Model	FI9853EP
Camera Name	FI9853EP
Camera ID	C4D6553A2358
Camera Time	2014/10/23 11:28:12
System Firmware Version	1.5.1.11
Application Firmware Version	2.22.1.131
Plug-In Version	3.0.0.4

Figure 4.2

Camera Model: Display the model of the camera.

Camera Name: The Device Name is a unique name that you can give to your device to help you identify it. Click Basic Settings and go to Device Name panel where you can change your camera name. The default device name is anonymous.

Camera ID: Display the MAC address of your camera. For example Device ID is 008414350787, the same MAC ID sticker is found at the bottom of the camera.

Camera Time: The system time of the device. Click **Basic Settings** and go to **Camera Time** panel and adjust the time.

System Firmware Version: Display the System Firmware version of your camera.

Application Firmware Version: Display the application firmware version of your camera.

Plug-In Version: Display the plug-in version of your camera.

4.2.2 Device Status

On this page you can see device status such as Alarm status, NTP/DDNS status and so on.

Device Status	
Refresh	
Alarm Status	No alarm
Recording Status	Not Recording
SD Card Status	No SD card
SD Card Free Space	0KB
SD Card Total Space	0KB
NTP Status	Failed
DDNS Status	Disabled
UPnP Status	Disabled
IR LED Status	Off

Figure 4.3

4.2.3 Session status

Session status will display who and which IP is visiting the camera now.

Session Status	
Refresh	
Username	IP Address
1	172.16.8.115
1	172.16.8.117

Figure 4.4

4.2.4 Log

The log record shows who and which IP address accessed or logout the camera and when.

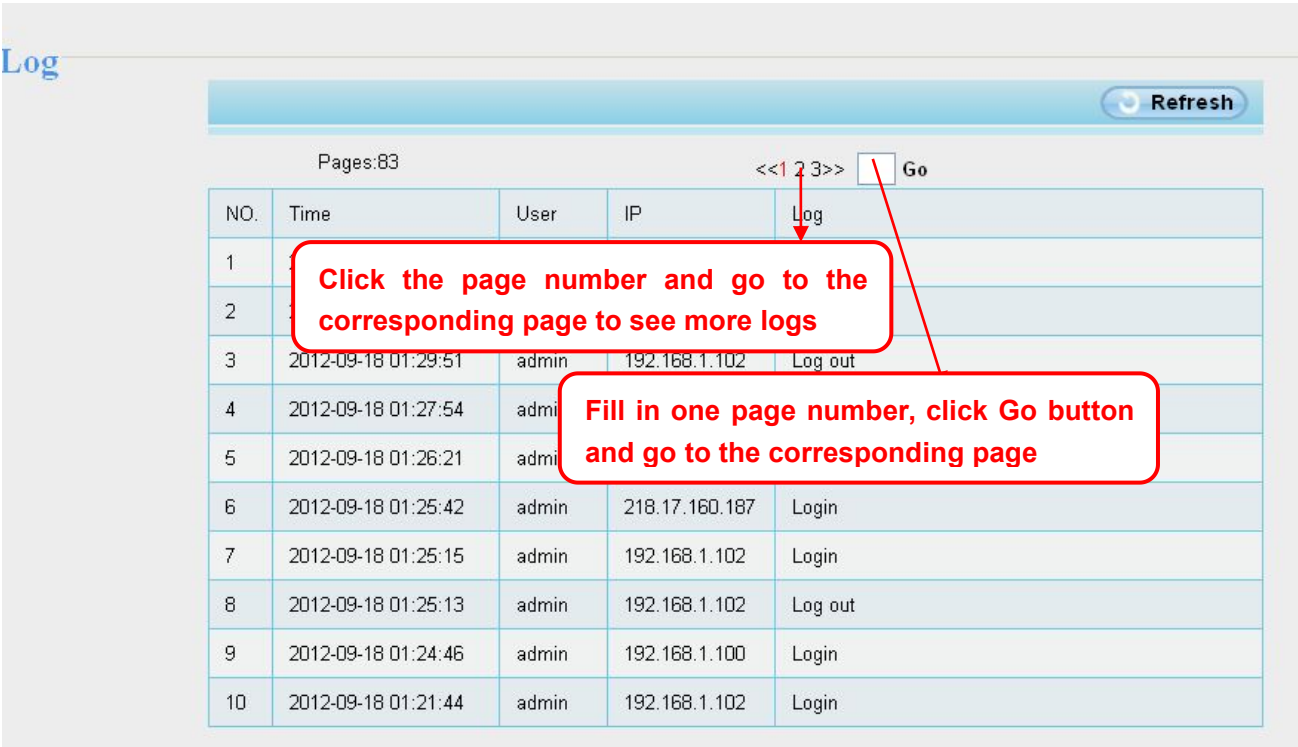


Figure 4.5

Reboot the camera and clear the log records.

4.3 Basic Settings

This section allows you to configure your Camera Name, Camera Time, Mail, User Accounts and Multi-Device.

4.3.1 Camera Name

You can define a name for your camera here such as apple. Click **Save** to save your changes. The alias name cannot contain special characters.



Figure 4.6

4.3.2 Camera Time

This section allows you to configure the settings of the internal system clocks for your camera.

Camera Time

Save Refresh

Time Zone: (GMT) Greenwich mean time; London, Lisbon, Ca

Sync with NTP server: ☐

NTP Server: time.nist.gov

PC Time: 2013-11-22 02:41:14 Sync with PC

Date Format: YYYY-MM-DD

Time Format: 12-hour

use DST: ☒

Ahead Of Time: 0 Minute

Figure 4.7

Time Zone: Select the time zone for your region from the drop-down menu.

Sync with NTP server: Network Time Protocol will synchronize your camera with an Internet time server. Choose the one that is closest to your camera.

Sync with PC: Select this option to synchronize the date and time of the Network Camera with your computer.

Manually: The administrator can enter the date and time manually. Please select the date and time format.

use DST: Select the **use DST**, then select the daylight saving time from the drop-down menu.

Click Save button to submit your settings.

4.3.3 User Accounts

Here you can create users and set privilege, **visitor**, **operator** or **administrator**. The default administrator user accounts are admin with a blank password.

User Accounts

Refresh

NO.	Username	Privilege
1	admin	Administrator
2		
3		
4		
5		
6		
7		
8		

Username:

Privilege:

☐ Change username

☐ Change password

Figure 4.8

How to change the password?

Firstly, select the account which you want to change the password, then select “Change password”, enter the old password and the new password, lastly click modify to take effect.

User Accounts

Refresh

NO.	Username	Privilege
1	admin	Administrator
2		
3		
4		
5		
6		
7		
8		

Username:

Password:

New password:

Privilege:

☐ Change username

☒ Change password

The maximum length of the user name is 20, support numbers, letters and symbols _ - @ \$ *

The maximum password length is 12, does not support the character & =

Figure 4.9

How to add account ?

Select one blank column, then enter the new user name, password and privilege, last click Add to take effect. You can see the new added account on the Account list.

User Accounts Refresh

NO.	Username	Privilege
1	admin	Administrator
2	operator	Operator
3		
4		
5		
6		
7		
8		

Username

Privilege

☐ Change username
☐ Change password

The maximum length of the user name is 20, support numbers, letters and symbols _ - @ \$ *

The maximum password length is 12, does not support the character & =

Figure 4.10

User Accounts Refresh

NO.	Username	Privilege
1	admin	Administrator
2	operator	Operator
3		
4		
5		
6		
7		
8		

Username

New username

Privilege

☒ Change username
☐ Change password

The maximum length of the user name is 20, support numbers, letters and symbols _ - @ \$ *

The maximum password length is 12, does not support the character & =

Figure 4.11

Delete: Select the account which you want to delete, then click Delete button to take effect.

How to change the username ?

Firstly, select the account which you want to change the username, then select "Change username", enter the new password, lastly click modify to take effect.

User Accounts Refresh

NO.	Username	Privilege
1	foscam	Administrator
2	test	Visitor
3		
4		
5		
6		
7		
8		

Username:

New username:

Privilege:

☒ Change username

☐ Change password

The maximum username length is 20 including numbers, letters and symbols _ - @ \$ *
 The maximum password length is 12 not including the character & = \$

Figure 4.12

NOTE:

The default administrator account cannot be deleted, but you can add other administrator users.

4.3.4 Multi-Camera

If you want to view multi-surveillance screens on one window, you need to login one camera, and set it as the main device, and do Multi-Device Settings, add other cameras to the first one camera. Before you do multi-cams settings, you need to assign different port such as 81, 82, 83, 84, 85, 86, 87, 88 to the cameras if there is 8 cams installed.

The firmware within the camera can support a maximum of 9 devices monitoring all at the same time. This page you can both add FOSCAM MJPEG and H.264 series cameras to the first camera and view multi-surveillance screen on one window.

Add cameras in LAN

In Multi-Device Settings page, you can see all devices searched in LAN. The 1st Device is the default one. You can add more cameras in the list in LAN for monitoring. The camera's software supports up to 9 IP Cameras online simultaneously. Click **The 2nd Device** and click the item in the **Device List in LAN**, the Alias, Host and Http Port will be filled in the boxes below automatically. Enter the correct username and password then click **Add**. Add more cameras in the same way.

Cameras On LAN

anonymous(192.168.11.193)
FI9821W for ebuyer (192.168.11.241)
anonymous(192.168.11.203)
anonymous(192.168.11.243)

The 1st Camera This Camera

[The 2nd Camera](#) None

Camera Model MJ

Camera Name anonymous

Host 192.168.11.203

HTTP Port 80

Media Port 80

Username admin

Password

Add **Delete**

[The 3rd Camera](#) None

[The 4th Camera](#) None

1 Click it, camera model, alias, host and HTTP Port will be filled in the following boxes automatically

2 Enter the User name and password of the 2nd camera

3 Click Add to take effect

Figure 4.13

Camera Model: Our Company produces two series cameras: MJPEG and H.264. Here will show you which series the camera belongs to.

Cameras On LAN

anonymous(192.168.11.193)
FI9821W for ebuyer (192.168.11.241)
anonymous(192.168.11.203)
anonymous(192.168.11.243)

The 1st Camera This Camera

[The 2nd Camera](#) anonymous(192.168.11.203)

[The 3rd Camera](#) FI9821W for ebuyer (192.168.11.241)

[The 4th Camera](#) anonymous(192.168.11.203)

[The 5th Camera](#) None

[The 6th Camera](#) None

[The 7th Camera](#) None

[The 8th Camera](#) None

[The 9th Camera](#) None

Note: If you want to access your camera remotely, make sure you are able to access it separately through a browser.

Figure 4.14

Back to **Surveillance Windows**, and click Four Windows option, you will see four cameras you added.

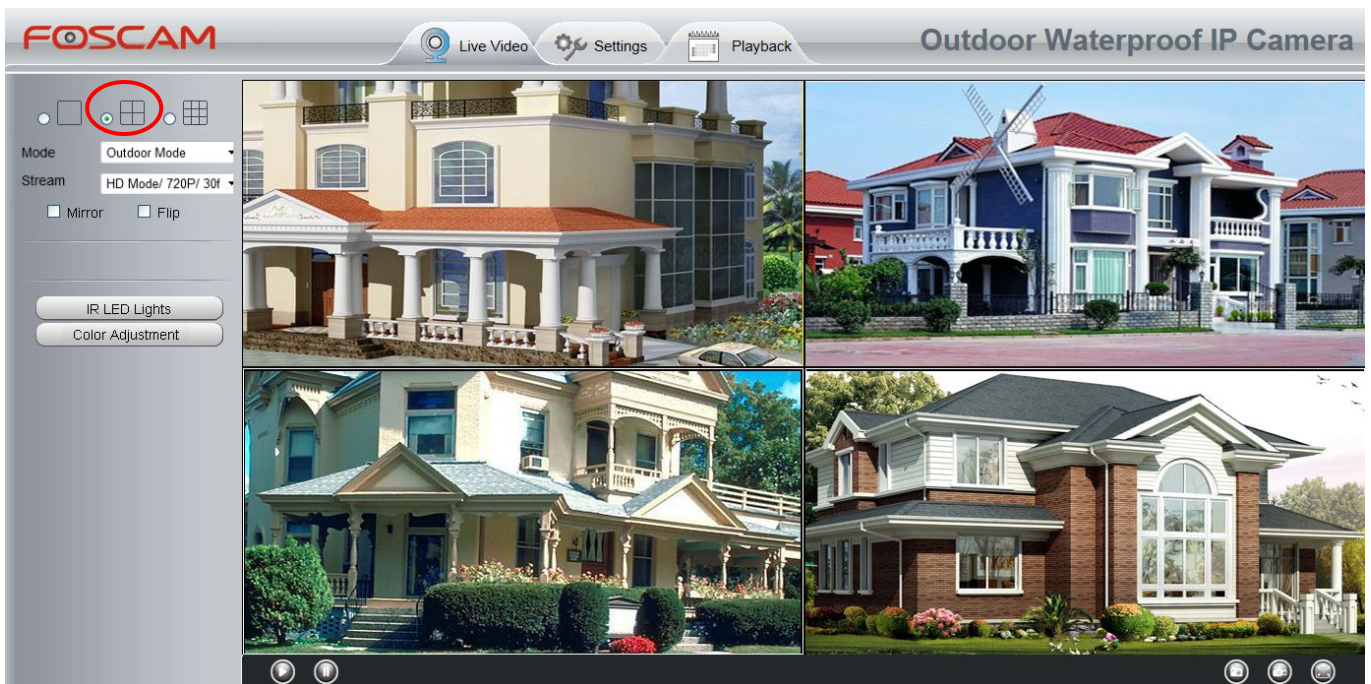


Figure 4.15

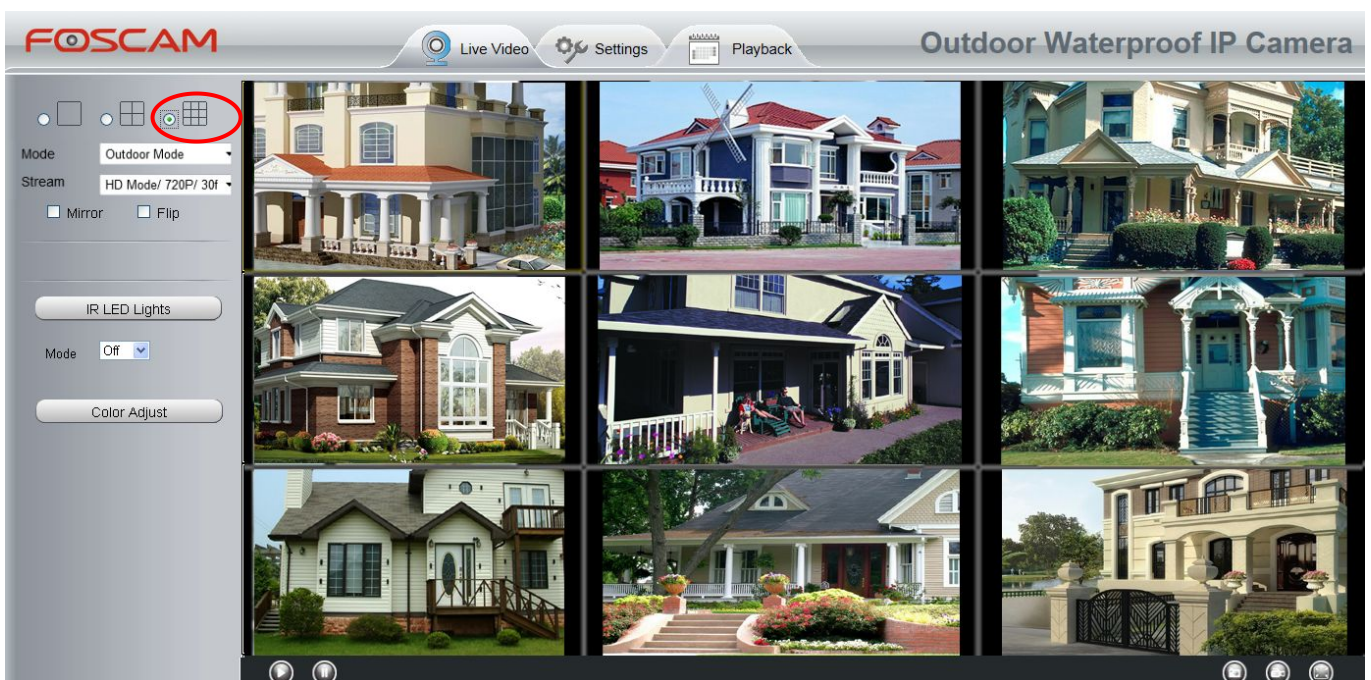


Figure 4.16

Add cameras in WAN

If you want to view all cameras via the internet(remote computer), you will need to add them using DDNS domain name. Firstly, make sure all of the cameras you added can be accessed through the internet. (Read **How to configure DDNS settings in chapter 4.4.4**)

Login to the first camera using a DDNS domain name and port.

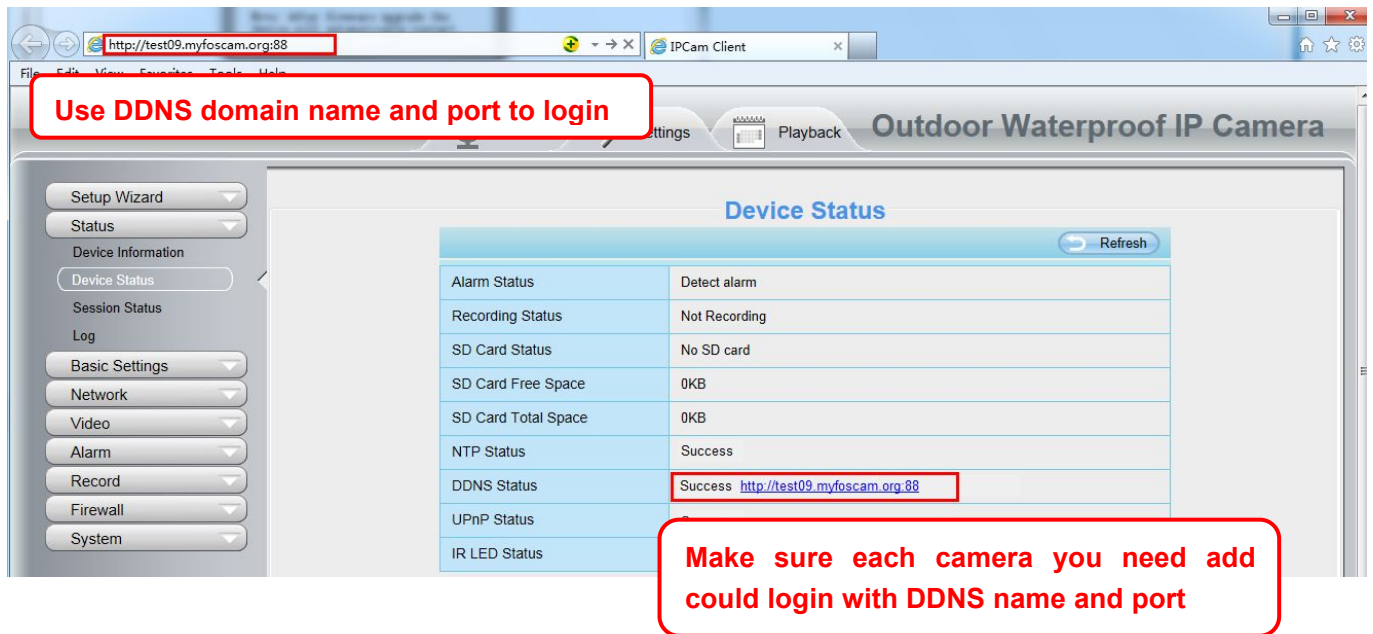


Figure 4.17

Click **Multi-Device Settings**. Choose **The 2nd Device**. Fill in the 2nd camera's name, DDNS domain name, port number. Enter user name and password and then choose Add.

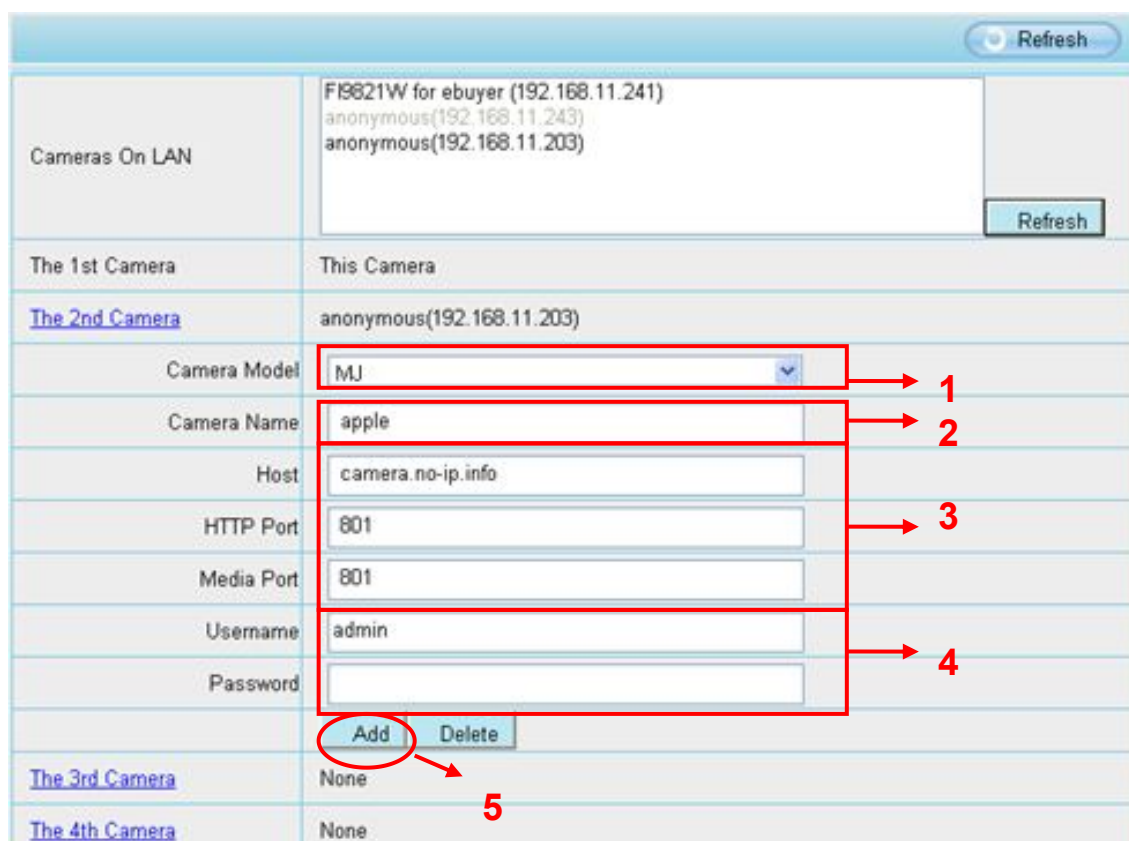


Figure 4.18

- 1----- The camera model: MJ or H264.
- 2----- The 2nd camera's name
- 3----- Fill in the 2nd camera's DDNS host not LAN IP

4 ---- Enter the 2nd camera's user name and password

5---- Click Add button and to take effect

NOTE:

Here the Host must be entered as the second camera's DDNS domain name, not its LAN IP.

Device List in LAN	
	<div>apple(192.168.13.102)</div> <div>mycamera(192.168.13.108)</div> <div>ipcam(192.168.13.107)</div> <div>FI9821VW-01(192.168.13.106)</div>
The 1st Device	This Device
The 2nd Device	apple(camera.no-ip.info)
The 3rd Device	ipcam(test01.foscam.org)
The 4th Device	mycamera(owlejwww.no-ip.info)
The 5th Device	None
The 6th Device	None
The 7th Device	None
The 8th Device	None
The 9th Device	None

Attention: If you want to access the device from internet, be sure the host and port that you set can be accessed from internet.

Figure 4.19

Return to video window. You will see all of the cameras accessible through the internet.

When you are away from home, you can use the first camera's DDNS domain name and port to view all the cameras via internet.

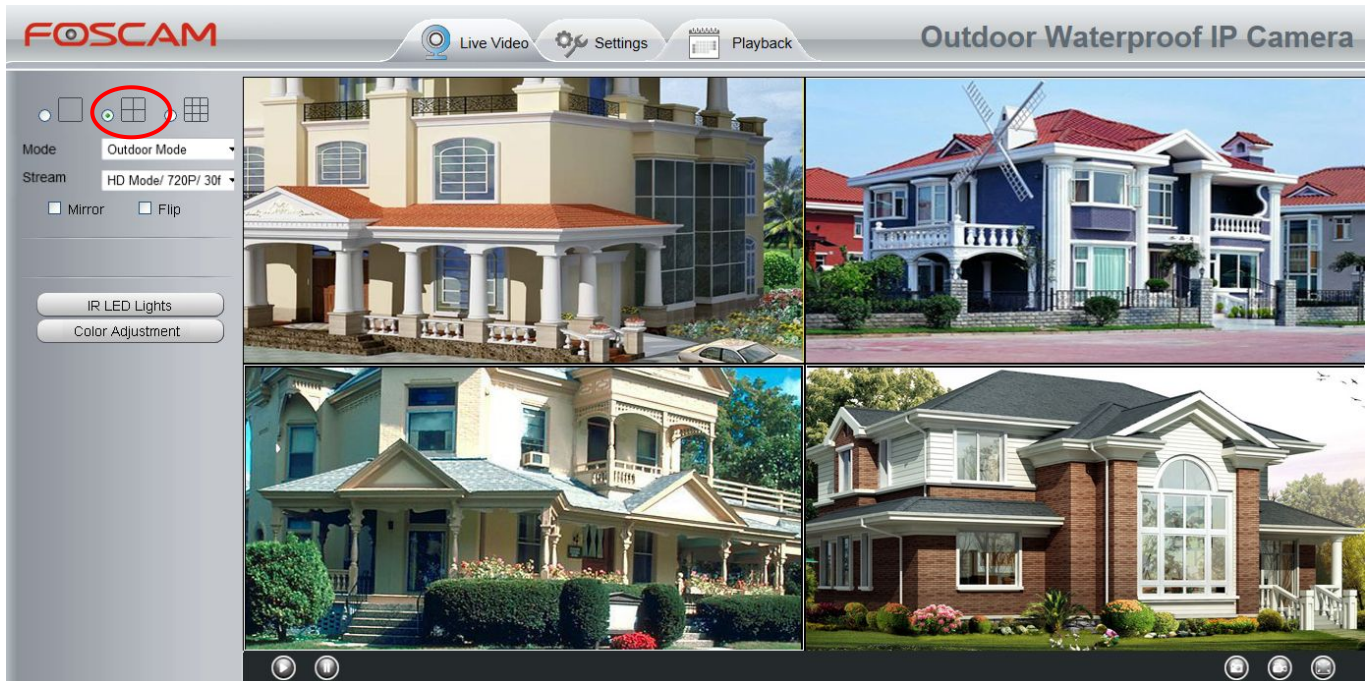


Figure 4.20

4.4 Network

This section will allow you to configure your camera's IP, PPOE, DDNS, UPnP, Port, Mail Settings and FTP Settings.

4.4.1 IP Configuration

If you want to set a static IP for the camera, please go to **IP Configuration** page. Keep the camera in the same subnet of your router or computer.

Save Refresh	
Obtain IP From DHCP <input type="checkbox"/>	
IP Address	192.168.0.109
Subnet Mask	255.255.255.0
Gateway	192.168.0.1
Primary DNS Server	192.168.0.1
Secondary DNS Server	202.96.134.133

Note: Once you save your settings, the camera will restart.

Figure 4.21

Changing settings here is the same as using the IP Camera Tool. It is recommended that you use the subnet mask, gateway and DNS server from your locally attached PC. If you don't know the subnet mask, gateway

and DNS server, you can check your computer's local area connection as follows:

Control Panel→Network Connections→Local Area Connections → Choose Support→Details.

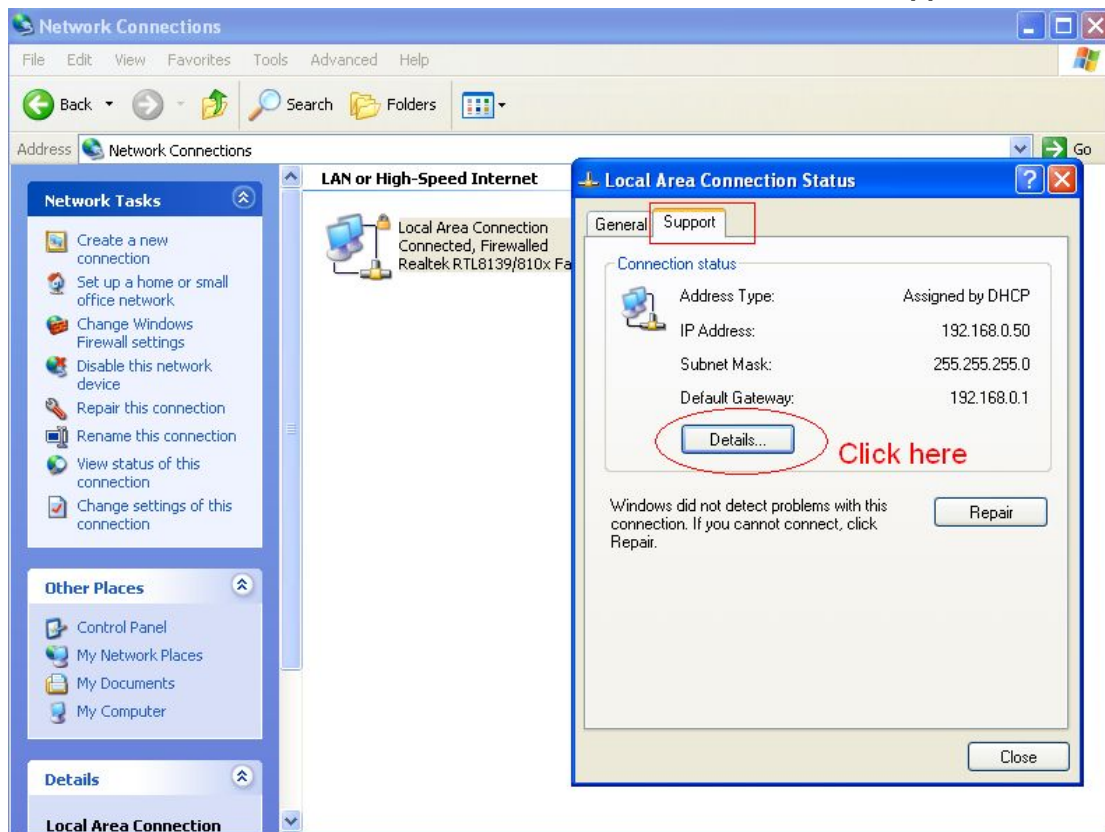


Figure 4.22

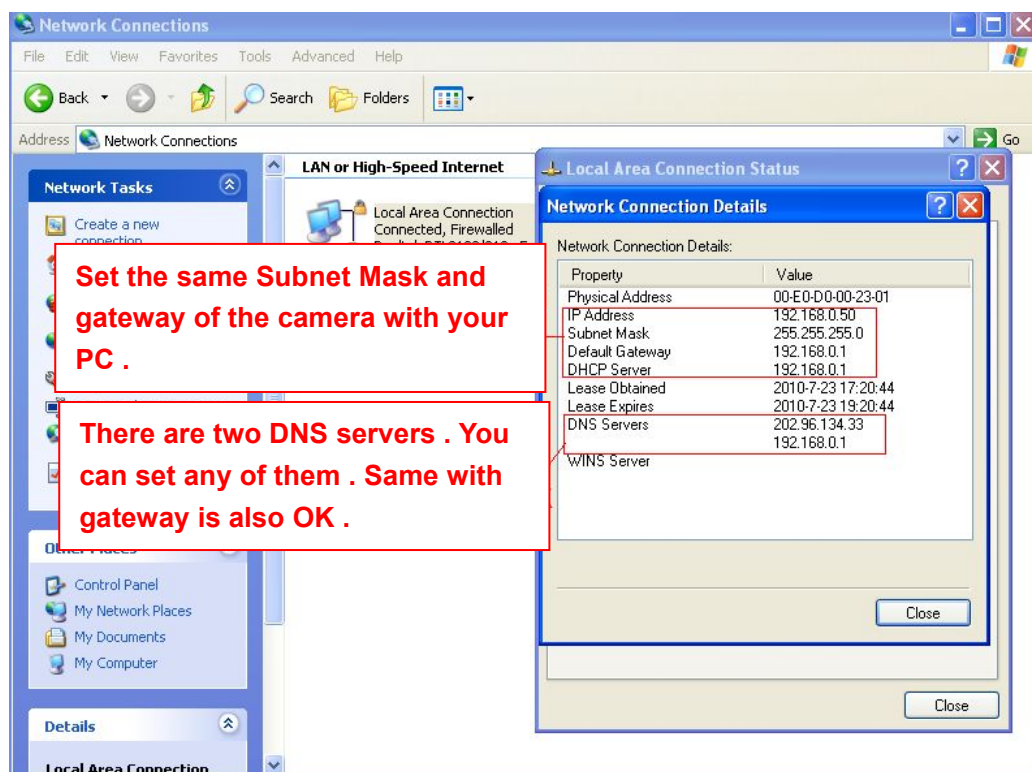


Figure 4.23

If you don't know the DNS server, you can use the same settings as the Default Gateway.

4.4.2 PPPoE

If you are using a PPPoE connection, enable it and enter the User Name and Password for your PPPoE account.

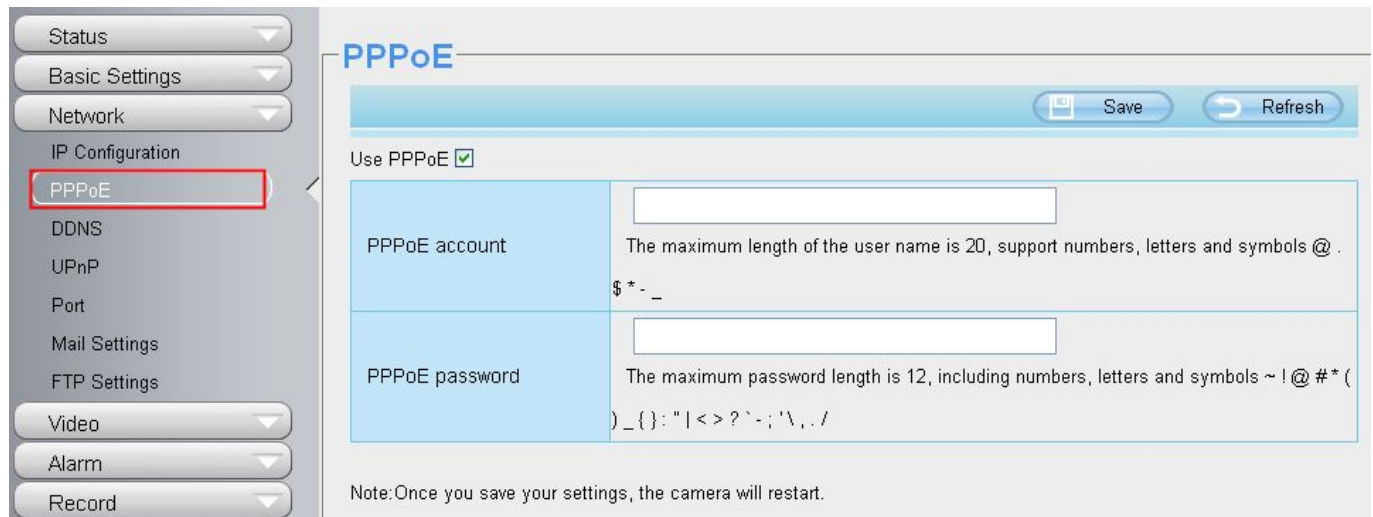


Figure 4.24

4.4.3 DDNS

FOSCAM camera has embedded a unique DDNS domain name when producing, and you can directly use the domain name, you can also use the third party domain name.

FOSCAM domain name

Here take test09.myfoscam.org for example. Go to option of **DDNS** on the **Settings->Network** panel, you can see the domain name.

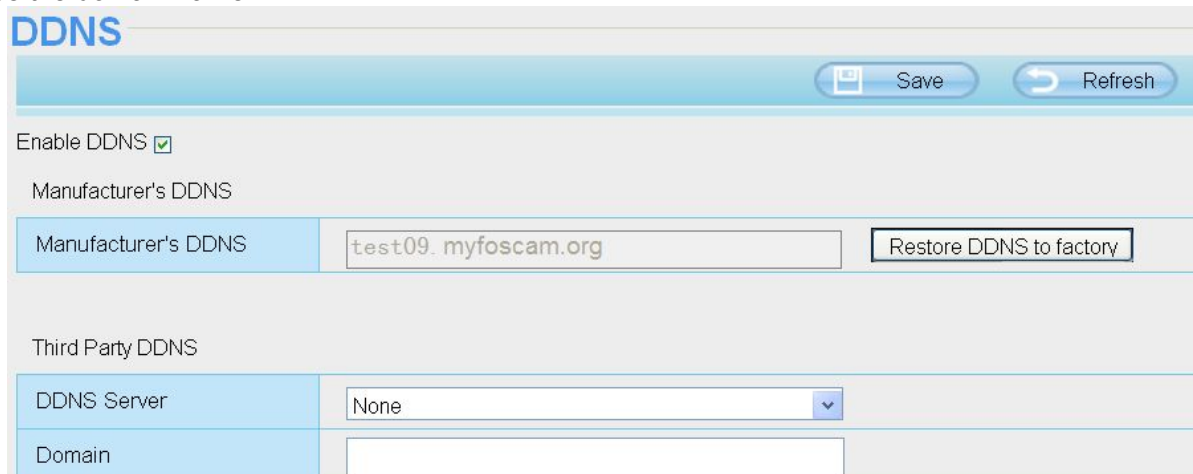


Figure 4.25

Now you can use [http:// Domain name + HTTP Port](http://Domain name + HTTP Port) to access the camera via internet.

Take hostname **test09.myfoscam.org** and **HTTP Port no. 8000** for example, the accessing link of the camera via internet would be [http:// test09.myfoscam.org:8000](http://test09.myfoscam.org:8000)

Restore DDNS to factory: If you have configured Third Party DDNS successfully, but you want to use Manufacturer's DDNS again , here click this button and start Manufacturer's DDNS Service.

Third Party Domain Name Settings

User can also use third part DDNS, such as www.no-ip.com , www.3322.com

Here take www.no-ip.com for example:

① **Step 1, Go to the website www.no-ip.com to create a free hostname**

Firstly: Login on www.no-ip.com and click No-IP Free to register.



Figure 4.26

Please register an account step by step according to instructions on www.no-ip.com

After registration, please login your email which used to register. You will receive an email from website, please click the link to activate your ACCOUNT as indicated in email.

Secondly: Login the link with the registered username and password to create your domain name.

Client Login

Home » [Client Login](#)

Email:

Password:

Login

Forget your password? No problem, [Click Here](#)

If you are not currently a registered user of No-IP.com, and would like to be for FREE, [register](#) as a new user.

User Login

Username:

Password:

[Create Account](#) [Forgot password?](#) [Login](#)

Additional Services

No-IP Enhanced
Upgrade your No-IP account to unlock many exciting features.

No-IP Backup DNS
Maximize uptime and add **Anycast** to your existing DNS infrastructure.

No-IP Monitoring

Figure 4.27

Hosts/Redirects | DNS Hosting | Domain Registration | Mail | SSL Certificates | Monitoring | Backup DNS | Renew/Activate

Your No-IP

Cuixiang, welcome to your No-IP! Last Login: 2012-04-04 21:40:56 PDT from IP 65.49.14.58

You have successfully logged into No-IP's member section. To start using No-IP's services select an icon below or choose an item from the navigation above.

[Manage Domains](#) [Add Domain](#) [Refer Friend](#) [Add a Host](#) [Manage Hosts](#)

Click Add a Host to create a domain name

FROM \$15 Find a Domain Name com [Search](#)

Need Help?

- Support Center
- Basic Troubleshooting Guide
- Support Ticket
- Contact Us

Get Connected

[RSS](#) [Facebook](#) [Twitter](#) [YouTube](#)

Own a domain name?

Use your own domain name with our DNS system. [Add](#) your domain name now or [read more](#) for pricing and features

Your No-IP Alerts

You do not have any notices at this time

Check this spot for important information regarding your account such as expiring services and trouble tickets.

[Home](#) | [API](#) | [Contact Us](#) | [Sitemap](#) | [Terms of Service](#) | [Privacy Policy](#) | [Blog](#)

Figure 4.28

Please create the domain name step by step according to instructions on www.no-ip.com

Step 2, DO DDNS Service Settings within the Camera

Please set **DDNS Settings** within the camera by **hostname**, a **user name** and **password** you've got from www.no-ip.com

Take **hostname** ycxgwp.no-ip.info, **user name** [foscam](#), **password** [foscam2012](#) for example.

Firstly, goes to option of **DDNS Settings** on the administrator panel.

Secondly, select No-Ip as a server.

Thirdly, fill **foscam** as DDNS user, fill password **foscam2012** as DDNS password, fill **ycxgwp.no-ip.info** as DDNS domain and server URL, Then click save to make effect. The camera will restart and to take the DDNS settings effective.

Fourthly, after the restart, login the camera, and go to option of **Device Status** on the administrator panel, and check if the DDNS status is successful.

If failed, please double check if you have input the correct hostname, user name, and password, and try to redo the settings.

NOTE:

If you have set Third Party DDNS successfully, the Foscam Domain Name will be invalid. The Third Party DDNS and the Foscam Domain Name cannot work at the same time, the last time you configured will take effect.

② Do port forwarding within the router

Example: The camera's LAN IP address is <http://192.168.8.100:2000>

Firstly, login the router, goes to the menu of **Port Forwarding or Port Trigger** (or named **Virtue Server** on some brands of router). Take Linksys brand router as an example, Login the router, and goes to **Applications & Gaming->Single Port Forwarding**.

Secondly, Create a new column by LAN IP address & HTTP Port No. of the camera within the router showed as below.

The screenshot shows the 'Single Port Forwarding' configuration page on a Linksys router. The table below represents the data shown in the 'To IP Address' column:

Application Name	External Port	Internal Port	Protocol	To IP Address	Enabled
None	---	---	---	192.168.8.1	<input type="checkbox"/>
None	---	---	---	192.168.8.1	<input type="checkbox"/>
None	---	---	---	192.168.8.1	<input type="checkbox"/>
None	---	---	---	192.168.8.1	<input type="checkbox"/>
None	---	---	---	192.168.8.1	<input type="checkbox"/>
Foscam Cam	2000	2000	Both	192.168.8.100	<input checked="" type="checkbox"/>
			Both	192.168.8.1	<input checked="" type="checkbox"/>
			Both	192.168.8.1	<input type="checkbox"/>

Annotations from the image:

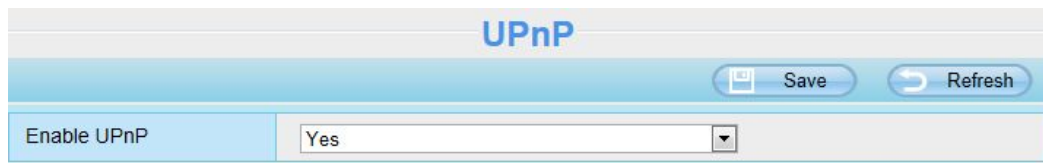
- Assign a name as you like here**: Points to the 'Application Name' dropdown menu.
- Fill the Media Port no. of the camera on the column of External Port and Internal Port**: Points to the 'External Port' and 'Internal Port' input fields.
- Fill the LAN IP of the camera here, just input the last section**: Points to the 'To IP Address' input field.

Figure 4.29

③ Use domain name to access the camera via internet

After the port forwarding is finished, you can use the domain name+ http no. to access the camera via internet. Take hostname **ycxgwp.no-ip.info** and **http no. 2000** for example, the accessing link of the camera via internet would be [http:// ycxgwp.no-ip.info:2000](http://ycxgwp.no-ip.info:2000)

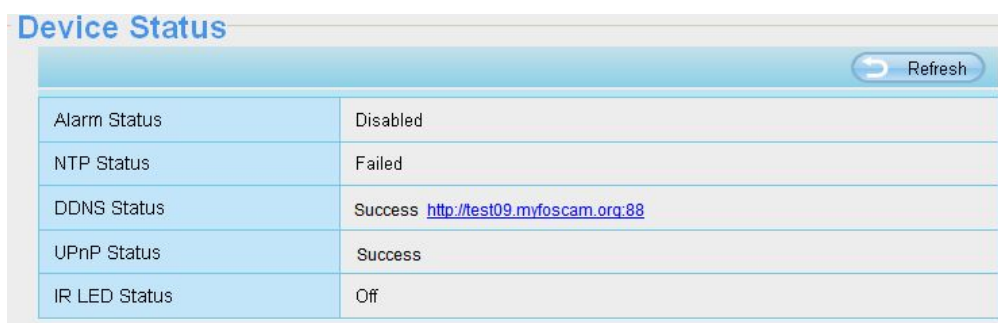
4.4.4 UPnP



The image shows a web interface for UPnP configuration. At the top, the title 'UPnP' is displayed. Below the title, there are 'Save' and 'Refresh' buttons. The main section is labeled 'Enable UPnP' and contains a dropdown menu currently set to 'Yes'.

Figure 4.30

The default UPnP status is closed. You can enable UPnP, then the camera's software will be configured for port forwarding. Back to the "Device Status" panel, you can see the UPnP status:



The image shows the 'Device Status' panel. It has a 'Refresh' button at the top right. Below it is a table with the following status information:

Alarm Status	Disabled
NTP Status	Failed
DDNS Status	Success http://test09.myfoscam.org:88
UPnP Status	Success
IR LED Status	Off

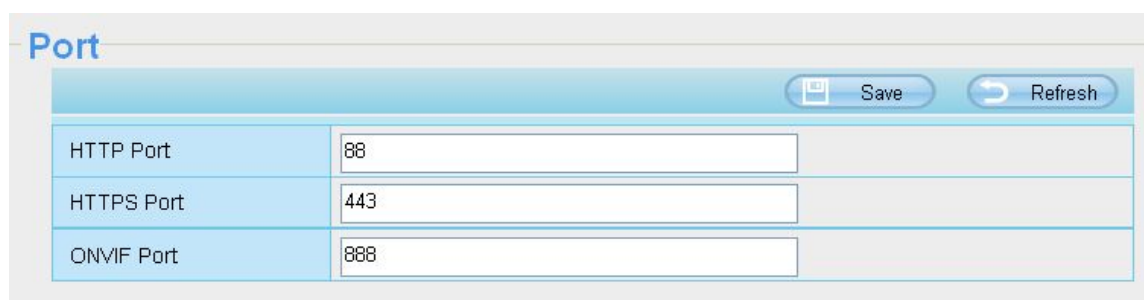
Figure 4.31

The camera's software will be configured for port forwarding. There may be issues with your routers security settings, and sometimes may error. We recommend you configure port forwarding manually on your router .

4.4.5 Port

This camera supports HTTP Port / HTTPS Port / ONVIF Port. HTTP Port is used to access the camera remotely.

HTTP port: By default, the HTTP and Media port is set to 88. Also, they can be assigned with another port number between 1 and 65535. But make sure they can not be conflict with other existing ports like 25, 21.



The image shows a web interface for port configuration. At the top, the title 'Port' is displayed. Below the title, there are 'Save' and 'Refresh' buttons. The main section contains three rows, each with a port type and a text input field:

HTTP Port	88
HTTPS Port	443
ONVIF Port	888

Figure 4.32

Another way to change the HTTP port no.

Step 1: Open the IP Camera Tool, select the camera you would like to change the port of, right click on the IP address, and click on "Network Configuration", this brings up the network configuration box.

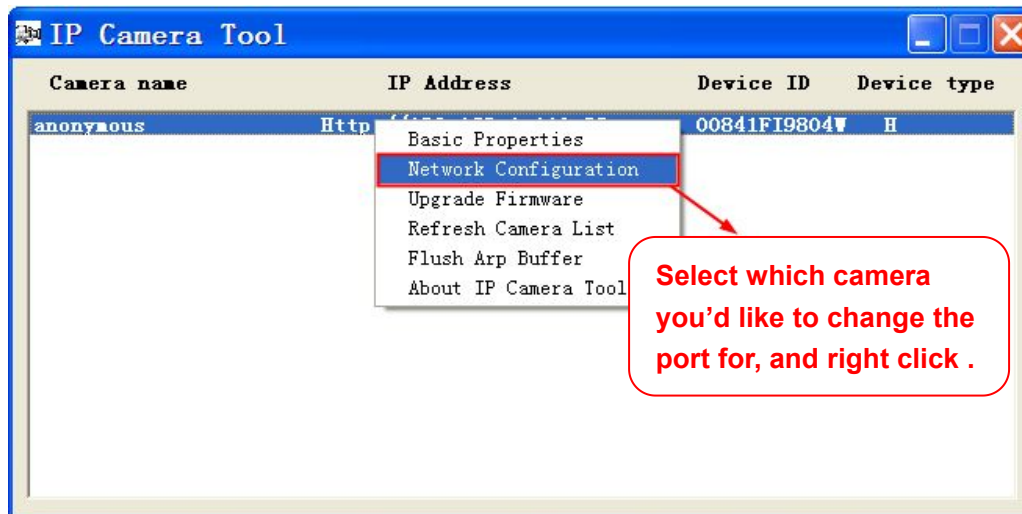


Figure 4.33

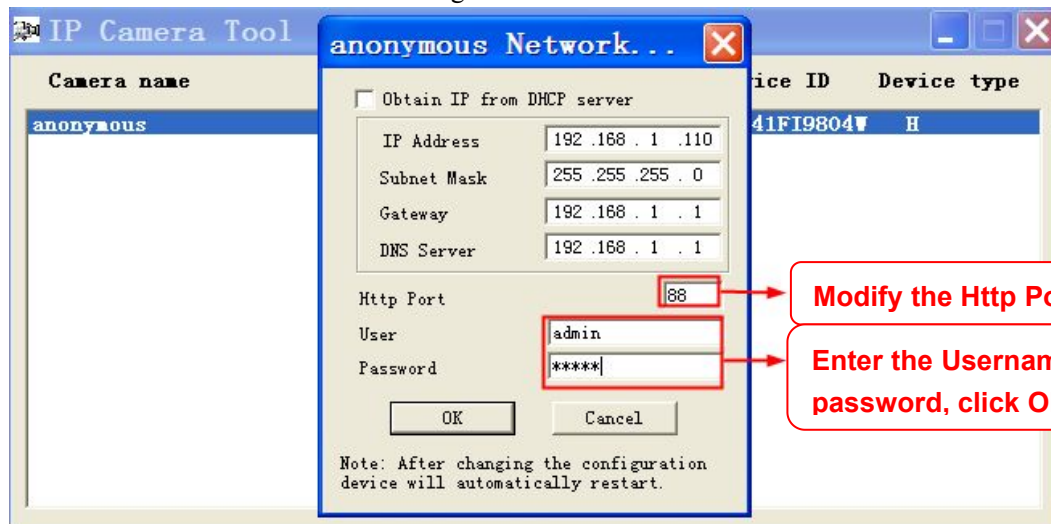
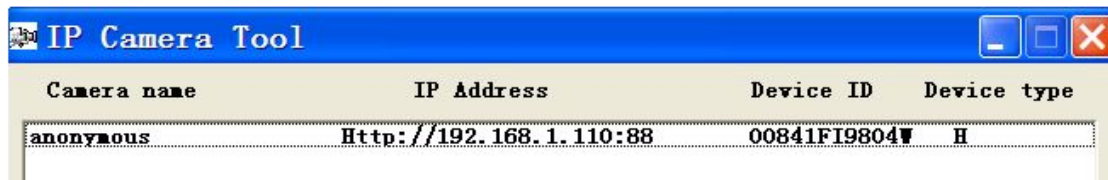


Figure 4.34

Step 2: Enter the username and password of the Administrator (default username is admin with a blank password), and click “OK” to apply changes.

Step 3: Wait around 10 seconds, you’ll see that the camera’s LAN IP address has changed. In our example it was changed to 2000, so we see http://192.168.8.102:2000 in IP Camera Tool. Also, the LAN IP address is now fixed at a static IP address of http://192.168.8.102:2000. This IP address will not change even if the camera is powered off and back on, the camera will remain on this LAN IP address. This is very important that a static LAN IP address is set, or you may have problems later with remote access and seeing the camera remotely if the camera loses power and reconnects on a different LAN IP address. Make sure you set a static LAN IP address!



Camera name	IP Address	Device ID	Device type
anonymous	Http://192.168.1.110:88	00841FI9804W	H

Figure 4.35

NOTE:

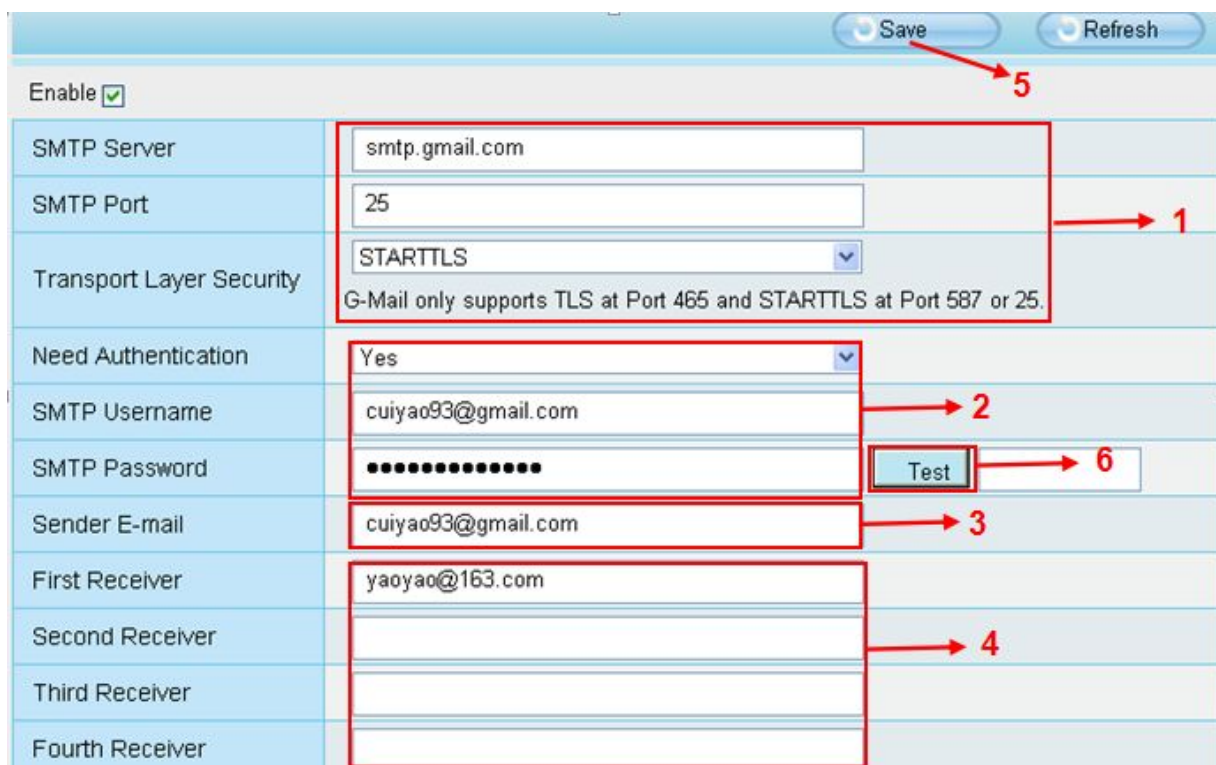
If the camera cannot be accessed, please make sure the port forwarding is succeed.

HTTPS port: The default port is 443. You can use the url to access the camera: **https:// IP + HTTPS port.**

ONVIF port: By default, the ONVIF port is set to 888. Also, they can be assigned with another port number between 1 and 65535(except 0 and 65534). But make sure they can not be conflict with other existing ports.

4.4.6 Mail Settings

If you want the camera to send emails when motion has been detected, here **Mail** will need to be configured.



Save Refresh

Enable ☒

SMTP Server	smtp.gmail.com	1
SMTP Port	25	
Transport Layer Security	STARTTLS <small>G-Mail only supports TLS at Port 465 and STARTTLS at Port 587 or 25.</small>	
Need Authentication	Yes	2
SMTP Username	cuiyao93@gmail.com	6
SMTP Password Test	
Sender E-mail	cuiyao93@gmail.com	3
First Receiver	yaoyao@163.com	4
Second Receiver		
Third Receiver		
Fourth Receiver		

Figure 4.36

1-----SMTP Server/ Port /Transport Layer Security Enter SMTP server for sender. **SMTP port** is usually set as 25. Some SMTP servers have their own port, such as 587 or 465, and Transport Layer Security usually is None. If you use Gmail, Transport Layer Security must be set to TLS or STARTTLS and SMTP Port must be set to 465 or 25 or 587, which port you choose should be decided by which Transport Layer Security you select.

2-----SMTP Username/ password: ID account and password of the sender email address

3-----Sender E-mail Mailbox for sender must support SMTP

4-----Receiver Mailbox for receiver need not support SMTP, you can set 4 receivers

5-----Save Click Save to take effect

6-----Test Click **Test** to see if Mail has been successfully configured.

Click **Test** to see if Mail has been successfully configured.

The screenshot shows a web-based configuration interface for SMTP settings. At the top right are 'Save' and 'Refresh' buttons. Below them is an 'Enable' checkbox which is checked. The main form contains the following fields:

- SMTP Server:** smtp.gmail.com
- SMTP Port:** 25
- Transport Layer Security:** STARTTLS (dropdown menu). A note below says: 'G-Mail only supports TLS at Port 465 and STARTTLS at Port 587 or 25.'
- Need Authentication:** No (dropdown menu)
- SMTP Username:** yaoyao@gmail.com
- SMTP Password:** [masked with dots]
- Sender E-mail:** yaoyao@gmail.com
- First Receiver:** yaoyao@163.com
- Second Receiver:** [empty field]
- Third Receiver:** [empty field]
- Fourth Receiver:** [empty field]

To the right of the 'SMTP Password' field is a 'Test' button. Next to it is a green box containing the word 'Success'. A red arrow points from this 'Success' box to a red-bordered box on the right that contains the text 'Test result'.

Figure 4.37

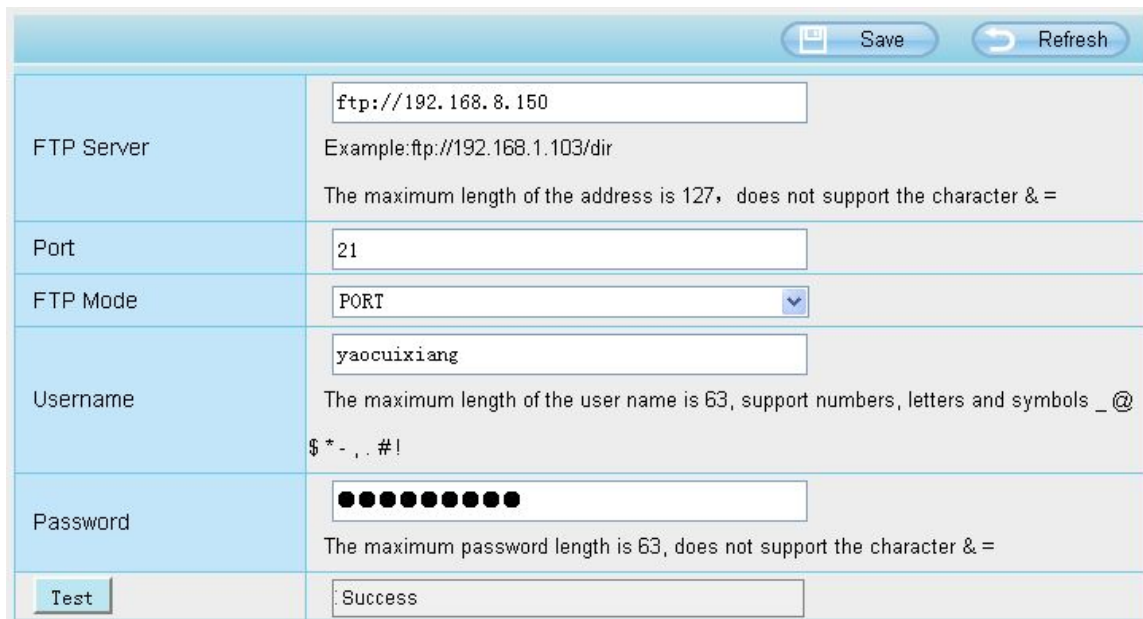
If the test success, you can see the **Success** behind the Test, at the same time the receivers will receive a test mail.

If the test fails with one of the following errors after clicking **Test**, **verify** that the information you entered is correct and again select **Test** .

- 1) Cannot connect to the server
- 2) Network Error. Please try later
- 3) Server Error
- 4) Incorrect user or password
- 5) The sender is denied by the server. Maybe the server need to authenticate the user, please check it and try again
- 6) The receiver is denied by the server. Maybe because of the anti-spam privacy of the server
- 7) The message is denied by the server. Maybe because of the anti-spam privacy of the server
- 8) The server does not support the authentication mode used by the device

4.4.7 FTP Settings

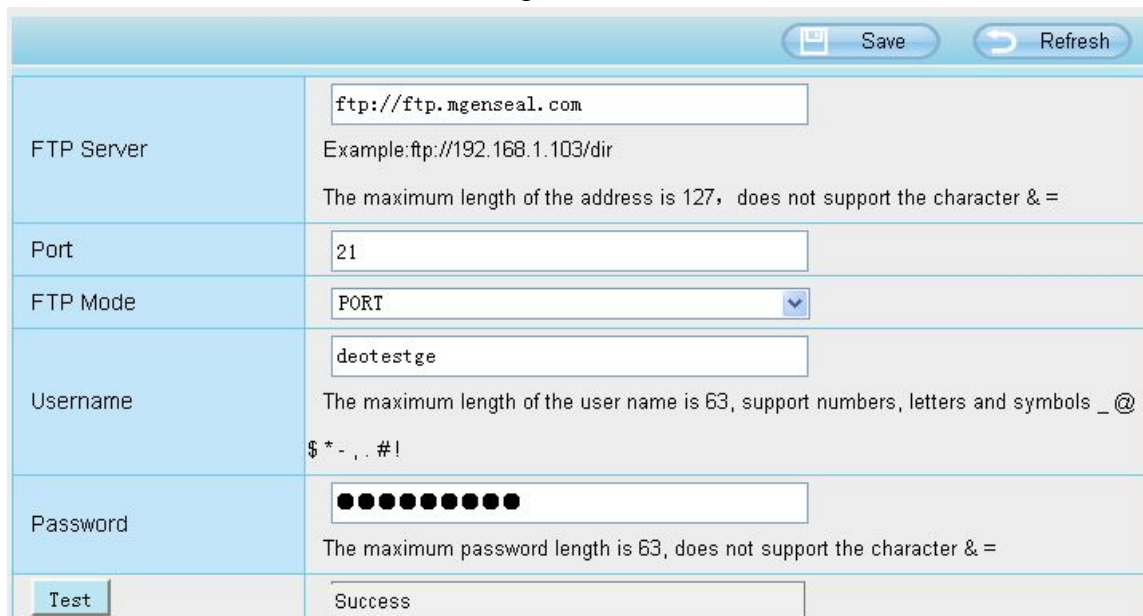
If you want to upload record files and images to your FTP server, you can set **FTP Settings**.



The screenshot shows the 'FTP Settings' window. At the top right are 'Save' and 'Refresh' buttons. The settings are as follows:

FTP Server	ftp://192.168.8.150 Example:ftp://192.168.1.103/dir The maximum length of the address is 127, does not support the character & =
Port	21
FTP Mode	PORT
Username	yaocuixiang The maximum length of the user name is 63, support numbers, letters and symbols _ @ \$ * - , . # !
Password	●●●●●●●● The maximum password length is 63, does not support the character & =
Test	Success

Figure 4.38



The screenshot shows the 'FTP Settings' window with the following settings:

FTP Server	ftp://ftp.mgenseal.com Example:ftp://192.168.1.103/dir The maximum length of the address is 127, does not support the character & =
Port	21
FTP Mode	PORT
Username	deotestge The maximum length of the user name is 63, support numbers, letters and symbols _ @ \$ * - , . # !
Password	●●●●●●●● The maximum password length is 63, does not support the character & =
Test	Success

Figure 4.39

FTP server: If your FTP server is located on the LAN, you can set as Figure4.41.

If you have an FTP server which you can access on the internet, you can set as Figure 4.42.

Port: Default is port 21. If changed, external FTP client program must change the server connection port accordingly.

FTP Mode: Here supports two modes: PORT and PASV.

Username/password: The FTP account and password.

Click **Save** to take effect.

Click **Test** to see if FTP has been successfully configured.

4.4.8 P2P

Access the camera by smart phone (Android or iOS operating system)

First of all, you need to open the P2P function of the camera at “Settings-->Network-->P2P.”



P2P	
<div>Save Refresh</div>	
UID	D9GT8PEPH5YF8GPMU7Z1
Enable P2P	<input checked="" type="checkbox"/>
P2P Port	59963

Figure 4.40

Search and install **Foscam Viewer** on Google Play and App Store for for Android and iOS devices.

If you want to know more details of the iOS APP or Android APP, see the *iOS App User Manual* or *Android App User Manual*.

4.5 Video

This section allows you to configure Video stream settings, On screen display and Snapshot settings.

4.5.1 Video Settings

There are two ways to set the stream video settings. They are main stream video settings and sub stream video settings.

Main stream video settings	
Enhanced Night Vision Definition <input checked="" type="checkbox"/>	
Stream Type	HD Mode
Resolution	720P
Bit Rate	2M
Frame Rate	30
Key Frame Interval	30
Variable bitrate	Yes

Sub stream video settings	
Stream Type	HD Mode
Resolution	VGA(640*480)
Bit Rate	512K
Frame Rate	15
Key Frame Interval	15

Figure 4.41

Stream type: There are four types to identify different streams you have set.

Resolution: The camera supports multiple types, For example: 960P, 720P, VGA. The higher the resolution is, the clearer video will become. But the code flux will become larger too, and it will take up more bandwidth. (Different models support different specific types.)

Bit rate: Generally speaking, the larger the bit rate is, the clearer video will become. But the bit rate configuration should combine well with the network bandwidth. When the bandwidth is very narrow, and bit rate is large, that will lead to video can not play well.

Frame rate: Note that a larger frame size takes up more bandwidth. When the video format is 50Hz, the maximum frame rate is 25 fps. When the video format is 60Hz, the maximum frame rate is 30 fps. You should lower frame rate when the bandwidth is limited. Normally, when the frame rate above 15, you can achieve fluently video.

Key Frame Interval: The time between last key frame and next key frame. The shorter the duration, the more likely you will get a better video quality, but at the cost of higher network bandwidth consumption.

Variable bitrate: Select the **Bit rate** type to constant or variable.

4.5.2 On Screen Display

This page is used to add timestamp and device name on the video.

Display Timestamp	Yes
Display Camera Name	Yes

Figure 4.42

Display Timestamp: There are two options: Yes or NO. Select Yes and you can see the system date on the video,

Display Camera Name: There are two options: Yes or NO. Select Yes and you can see the device name on the video.

4.5.3 Privacy Zone

This page is used to set some mask as privacy zone on the video.

Privacy Zone	
Allow Privacy Zone	Yes
Set Privacy Zone	

Figure 4.43

Allow On Screen Display Mask: There are two options: Yes or NO. Select yes and draw a mask area on the video, the mask area will be black on the video.



Figure 4.44

Click **Back** button and return to the OSD page, click Save to take effect.

Back to the surveillance window, you can see the mask area as the following picture:



Figure 4.45

4.5.4 Snapshot Settings

On this page you can set the snapshot pictures' image quality and the storage path.

Snapshot Settings

Save
 Refresh

Manual snap Quality	Medium
Pictures Save To	FTP

Enable timing to capture ☒

Capture interval	2	(1-65535s)
------------------	---	------------

Schedule

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
All																								
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								
SUN																								

Figure 4.46

Image Quality: Low, Middle and High. The higher the quality, the picture will be clearer.

Alarm Pictures Save Path: FTP. If you have done FTP and Alarm settings, when alarming, the camera will snap pictures to the FTP automatically.

Enable timing to capture

To enable capture interval, follow the steps below:

- 1 Select Enable timing to capture
- 2 Capture interval: The interval time between two captures.
- 3 Select the capture time
 - Capture anytime
Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will capture.
 - Specify an capture schedule
Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, the camera will capture.
 - Press the left mouse and drag it on the time boxes, you can select the serial area,
- 4 Click **Save** button to take effect.

4.5.5 IR LED Schedule

On this page you can set the schedule time for switching IR LED lights. When parameter Mode is set to the **Schedule** on the Live **Video** window, At these schedule time, the IR LED lights will be turned off.

Figure 4.47

4.5.6 Lens Distortion Correction

On this page you can set the distortion correction. There are three options: Low, Medium, High.

Figure 4.48

If you replace the lens, the image has found distortion, uneven and so on, you can modify the **Select The Distortion Correction Parameter** to calibration images.

4.6 Alarm

IP Camera supports **Motion Detection Alarm**, when the motion has been detected, it will send emails or upload images to FTP.

Figure 4.49

To enable motion detection, follow the steps below:

1 Enable Motion detection

2 Sensitivity---- It supports five modes: Lowest, Lower, Low, Medium and High. The higher the sensitivity, the camera will be more easily alarmed. Select one motion sensitivity.

3 Trigger interval--- The interval time between two motion detections. Here supports 5s/6s/7s/8s/9s/10s/11s/12s/13s/14s/15s. Select one interval time.

4 Select the alarm indicators

When the motion has been detected, the alarm status will turn to Detect alarm.

Refresh	
Alarm Status	Detect alarm
NTP Status	Disable
DDNS Status	Disable
UPnP Status	Success
WiFi Status	Connected to:foscam-wifi
IR LED Status	Off

Figure 4.50

There are four alarm indicators:

A PC Sound

If you select PC Sound, when the motion has been detected, the people around the PC will hear beep alarm sound.

B Send E-mail

If you want to receive alarm emails when motion is detected, you must select Send E-mail and set Mail Settings first.

C Take Snapshot

If you select this checkbox, when the motion has been detected, the camera will snap the live view window as a still picture and load it to the FTP. Make sure you have set FTP and set FTP as the storage path in Video->Snapshot settings panel.

Time interval: The interval time between two pictures.

D Recording

If you select this checkbox, when the motion has been detected, the camera will recording and load it to the FTP server. Make sure you have set FTP and set FTP as the storage path in Video->Snapshot settings panel.

5 Set detection area

Click set detect area and it pop up a window, then you can draw the detection area. Click Back button after settings. When something moving in the detection area, the camera will alarm.

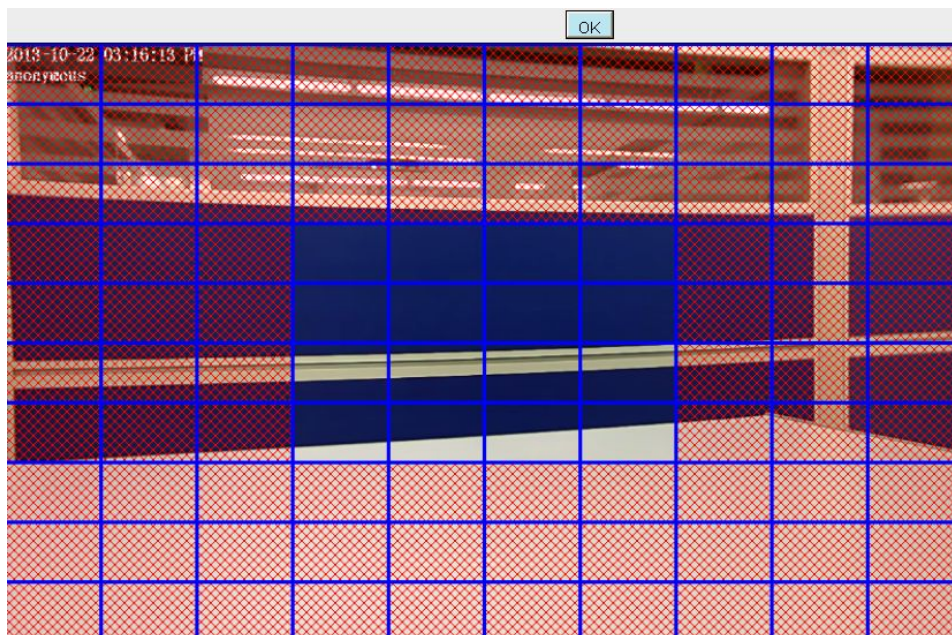


Figure 4.51

6 Alarm Schedule

① Alarm anytime when motion is detected

Click the black button up the MON, you will see all time range turn red. When something moving in the detection area at anytime, the camera will alarm.

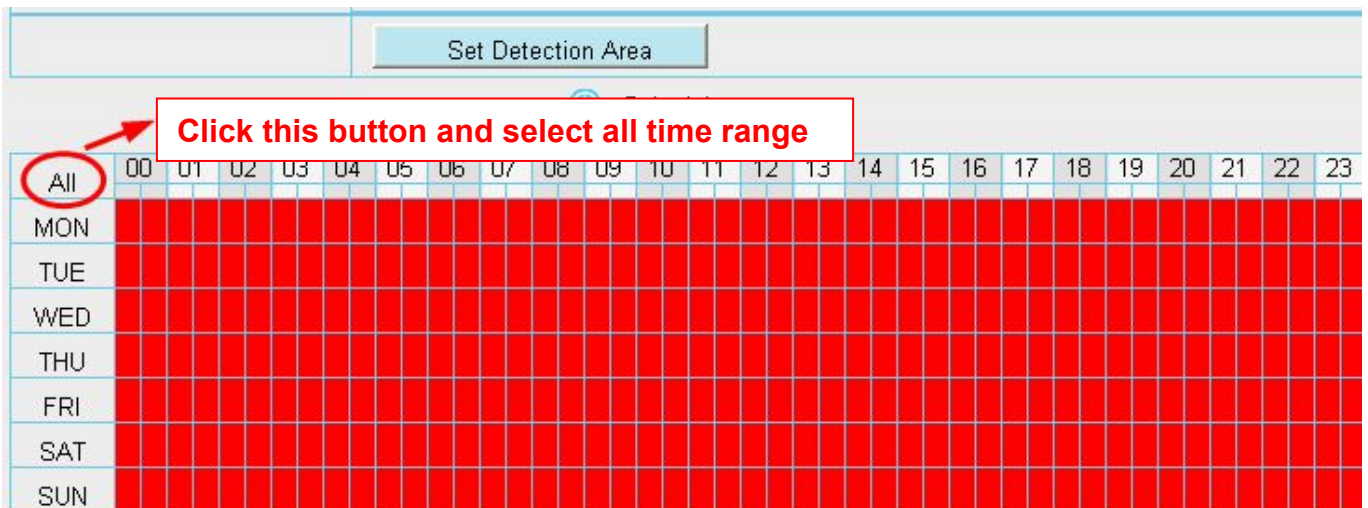


Figure 4.52

② Specify an alarm schedule

Click the week day words, the corresponding column will be selected. For example, click TUE, the all column of TUE turns to red, that means during Tuesday whole day, when something moving in the detection area, the camera will alarm.

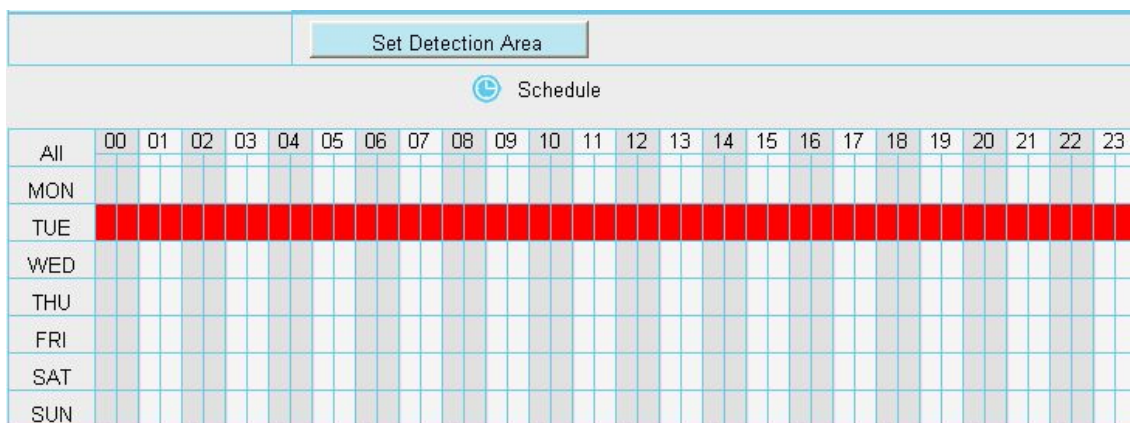


Figure 4.53

③ Press the left mouse and drag it on the time boxes, you can select the serial area.

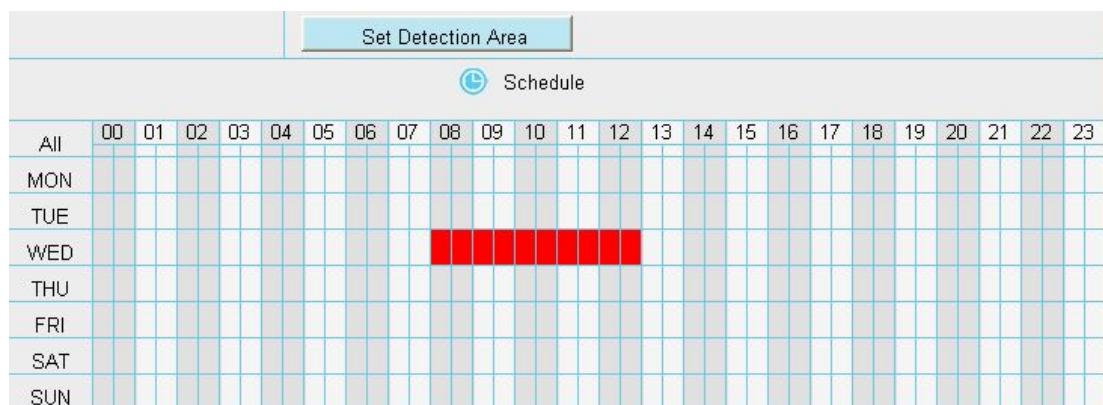


Figure 4.54

7 Click Save button to take effect. When the motion is detected during the detection time in the detection area, the camera will alarm and adopt the corresponding alarm indicators.

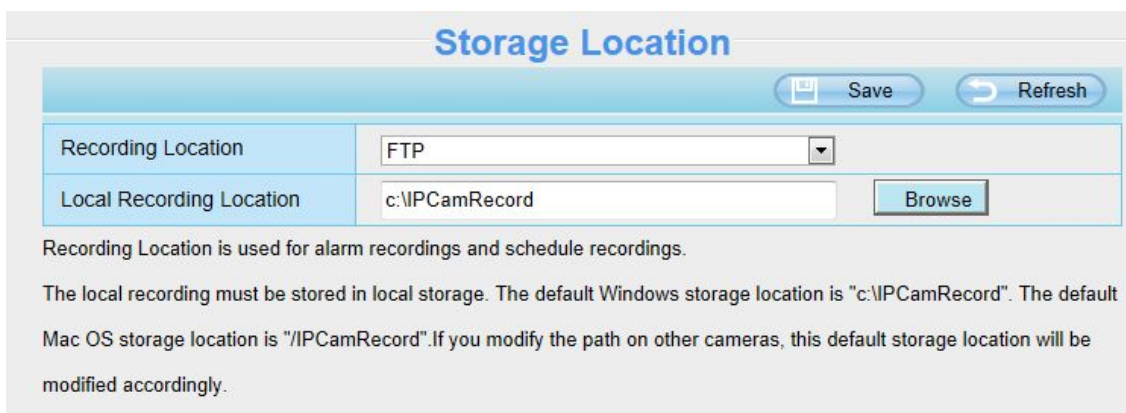
NOTE:

You must set the detection area and detection schedule, or else there is no alarm anywhere and anytime.

4.7 Record

4.7.1 Storage Location

On this page you can change the manually recording storage path, the default storage path is C:\IPCamRecord.



Storage Location

Save Refresh

Recording Location	FTP
Local Recording Location	c:\IPCamRecord Browse

Recording Location is used for alarm recordings and schedule recordings.

The local recording must be stored in local storage. The default Windows storage location is "c:\IPCamRecord". The default Mac OS storage location is "/IPCamRecord". If you modify the path on other cameras, this default storage location will be modified accordingly.

Figure 4.55

Recording Location: SD card or FTP. When the camera alarmed, it will store the alarm files to the SD card or FTP. Make sure the camera has been inserted the SD card. On this page, you can see the available space of the SD card.

Local Recording Location: For Windows OS, the location recording path is c:/ IPCamRecord, you can change another one. For MAC OS, the manual recording path is: / IPCamRecord.

4.7.2 Alarm Record



Alarm Recording

Save Refresh

Enable Pre-Record ☒

Pre-recorded Time	5s
Alarm Recording Time	30s

Figure 4.56

4.7.3 Local Alarm Location

On this page you can enable local alarm record, and select the local alarm record time.

Local Alarm Recording

Save

Refresh

Enable Local Alarm Recording ☒

Local Alarm Recording Time

30s

Figure 4.57

4.7.4 Record Schedule

On the page you can configure the schedule record.

- When the parameter **Recording Location** is set **SD Card** on the **Storage Location** page, you can configure parameters as shown in follow figure.

Scheduled Recording To SD Card

Save

Refresh

Enable Scheduled Recording ☒

Enable Long-time recording

No

Frame Rate

30

Record full strategy

Cover

Stream

Main stream

Edit Scheduled Recording


All	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								
SUN																								


Figure 4.58

You can select the main stream or sub stream from the drop-down.

- When the parameter **Recording Location** is set **FTP** on the **Storage Location** page, you can configure parameters as shown in follow figure.

Scheduled Recording To FTP


 Save

 Refresh

Enable Scheduled Recording ☒

Stream

Main stream

 Edit Scheduled Recording

All	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								
SUN																								

Scheduled recording only supports SD card or FTP server.

Scheduled recording will stop while alarm recording begins , and go on automatically after it ends.


Figure 4.59

Click **Save** button to take effect.

4.7.5 SD Card Management

On this page you can see the information of the SD card.
This camera supports SD Card and the max size of SD card must be under 32G.

SD Card Management

 Refresh

SD Card Status	No SD card
SD Card Free Space	0KB
SD Card Total Space	0KB

Note: SD card management is only effective when access the IPC in LAN

Figure 4.60

Go to the **Settings→Status→Device Status** page, you can see the SD card status.



Figure 4.61

The default storage path of alarm record files is SD card, when the available size of SD card is less than 256M, the old record files will be deleted automatically.

4.8 Firewall

This section explains how to control the access permission by checking the client PC's IP addresses. It is composed of the following columns: **Block access from these IP addresses** and **Only allow access from these IP addresses**.

Enable Firewall ☒

IP Filtering: Block access from these IP addresses

IP Address #1	
IP Address #2	
IP Address #3	
IP Address #4	
IP Address #5	
IP Address #6	
IP Address #7	
IP Address #8	

Figure 4.62

Enable firewall, If you select Only allow access from these IP addresses and fill in 8 IP addresses at most, only those clients whose IP addresses listed in the **Only allow access from these IP addresses** can access the Network Camera. If you select **Block access from these IP addresses**, only those clients whose IP addresses are in the IP list cannot access the Network Camera.

Click **Save** to take effect.

4.9 System

In this panel, you can back up/restore your camera settings, upgrade the firmware to the latest version, restore the camera to default settings and reboot the device.

4.9.1 Back-up& Restore

Click **Back-up** to save all the parameters you have set. These parameters will be stored in a bin file for future use.

Click Browse and select the parameters file you have stored, then click Submit to restore the restore the parameters.

Backup is used to save your current settings. It is recommended to backup your configuration before modifying or upgrading firmware.

Settings can be restored by uploading the backup file.

Path:

Note:

1. All current settings will be lost when importing a configuration file. If an incorrect file is loaded, the camera may stop working correctly.
2. Keep the power on during this process, or you may damage your camera. Your camera will reboot automatically once restoration is completed.

Figure 4.63

4.9.2 System Upgrade

Click “Download the latest firmware”, you will see the following screen. And click “save” to save the firmware on your computer locally.

System Upgrade

Current Firmware Version: 2.22.1.131

Result

Your camera will reboot during the firmware upgrade.

Figure 4.64

Your current firmware version will be displayed on your screen. You may go to the **Status → Device Information** page to check for the latest firmware versions available.

Click **Browse**, choose the correct bin file and then click **System upgrade**.

Don't shut down the power during upgrading. After upgrading, you can see the upgrade result.



Figure 4.65

Upgrade Firmware by IP Camera Tool



Double click the IP Camera Tool shot icon, select the Camera IP that you want to upgrade the firmware. Then select Upgrade Firmware and enter the username and password, choose the firmware file, and upgrade.

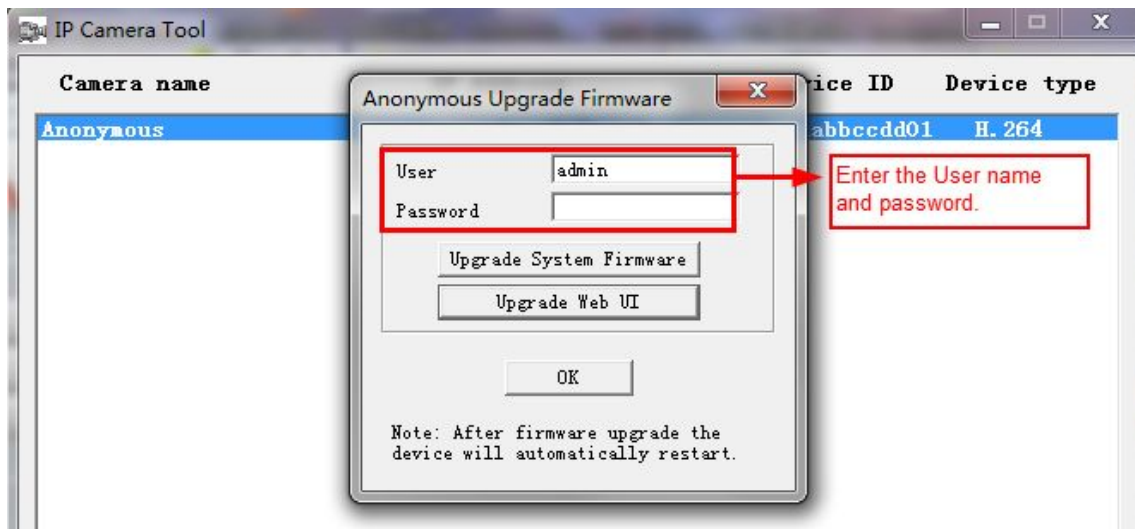


Figure 4.66

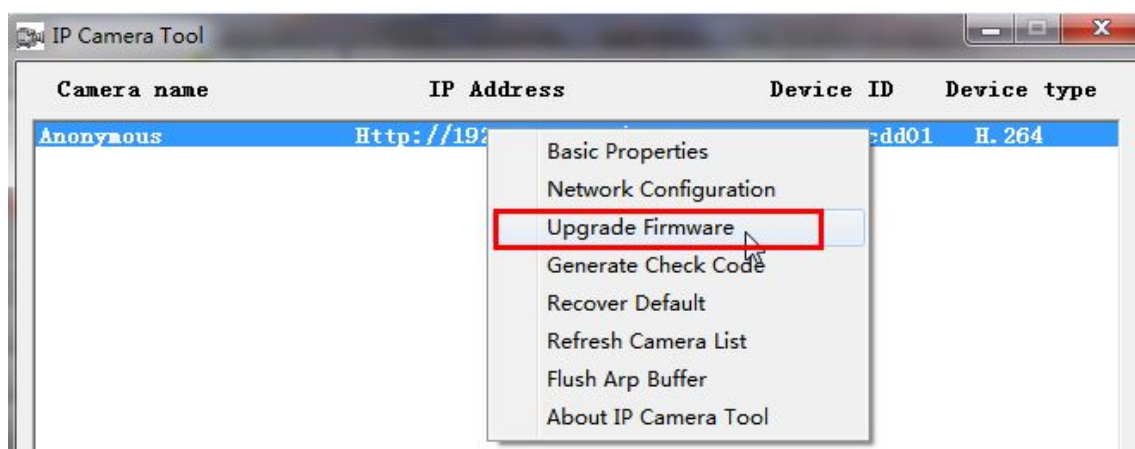


Figure 4.67

CAUTION:

If your camera works well with the current firmware, we recommend not upgrading. Please don't upgrade the firmware unnecessarily. Your camera may be damaged if mis-configured during an upgrade.

NOTE:

- 1) Don't upgrade the firmware through the web UI in WAN, or else the upgrade may be failed.
- 2) Please ensure you have download the correct firmware package for your camera before upgrading. Read the upgrade documentation (readme.txt file) in the upgrade package before you upgrade.
- 3) Upon downloading the firmware check the sizes of the .bin files. They must match the size in the readme.txt file. If not, please download the firmware again until the sizes are the same. Your camera will not function correctly if a corrupt .bin file is used.
- 4) Normally, only Device WEB UI need to be upgrade, please do not try to upgrade the Device Firmware.
- 5) Never shut down the power of the camera during upgrade until the IP camera restart and get connected.
- 6) After upgrade successfully, please clear the cache of browser, uninstall the old plugin and re-install it, then reset the camera to the default factory settings before using the camera.

4.9.3 Patch Installation

Click "Browse" to select the correct patch file, and then click "Install Patch" to install the patch. Do not turn off the power during it installing. After installing is complete, you will receive a system prompt.

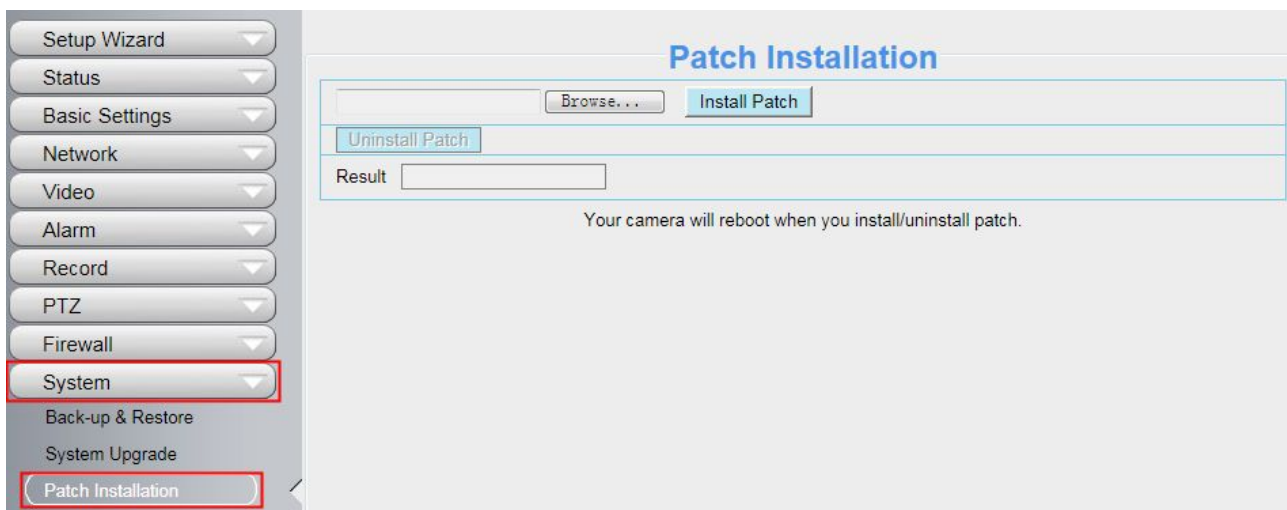


Figure 4.68

4.9.4 Factory Reset

Click **Factory Reset** button and all parameters will return to factory settings if selected. The default administrator username is admin with a blank password.

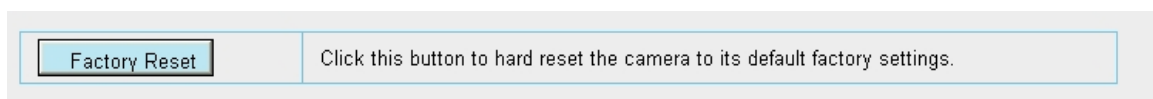
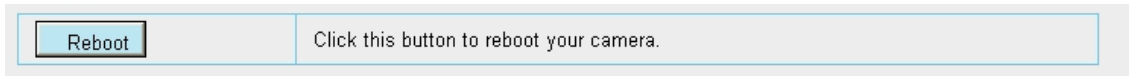


Figure 4.69

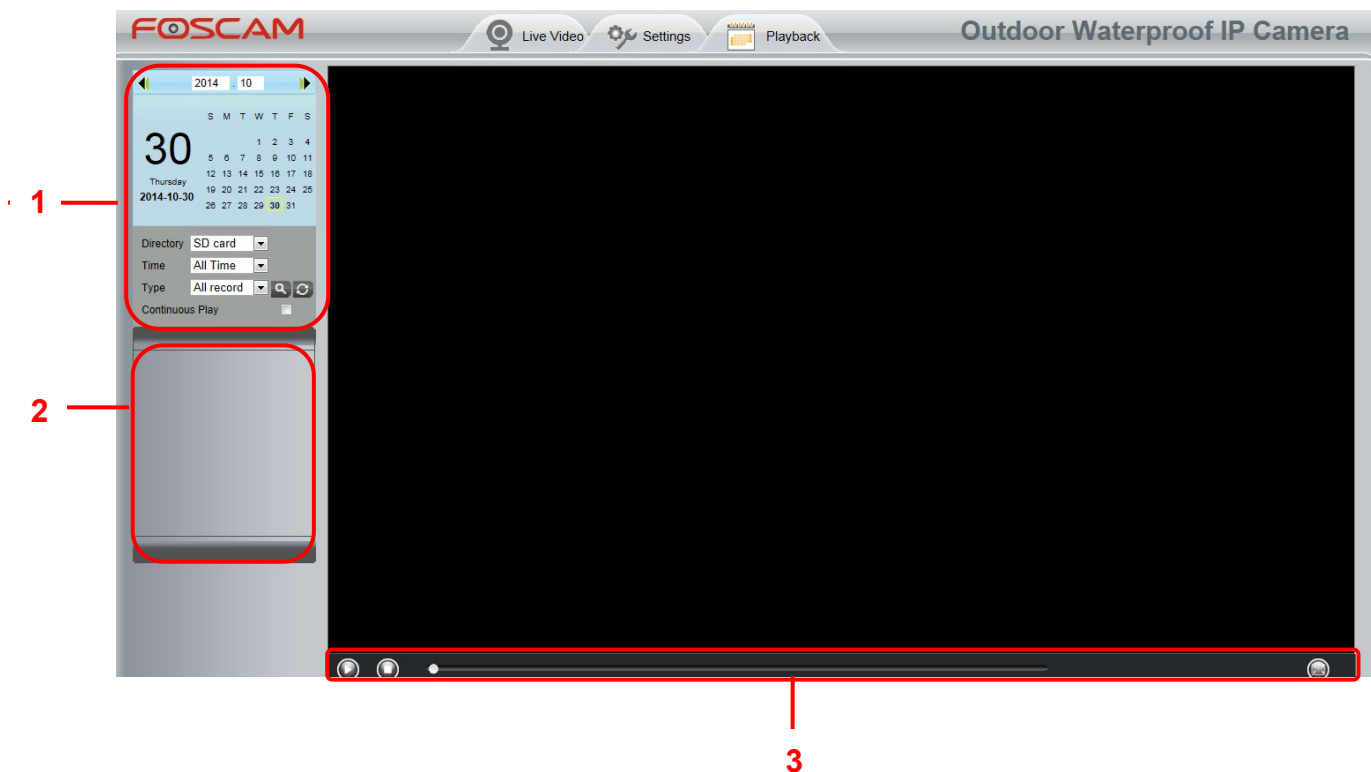
4.9.5 Reboot

Click **Reboot System** to reboot the camera. This is similar to unplugging the power to the camera.



5 Playback

On this page you can view the record files stored in the SD card.




Section 1 Define the Record files time and Type

Directory : The storage path of record files

Time : Here supports three types: current day, current month and All records. Another way, select the time on the time&date manually.



Figure 5.1

Type **All records** : The type of records files, Here supports two types: Normal record, Alarm record and All records.



: Click this button to search all record files satisfy the conditions you selected.

Continuous Play: Select the checkbox to play continuously all the record files.

Section 2 Search record files

On this panel you can see all record files satisfy the conditions you set.

Section 3 Play/Stop/Full screen buttons

Please select one record file before use these buttons.



Click this button to play the record files



Click this button to stop the record files



Click this button to make full screen, and double click left mouse to exit full screen.

6 Phone APPs

FOSCAM provides APP for Android and iOS system, which helps to view and listen to your world anywhere..... anytime. Search and install **Foscam Viewer** on Google Play for Android devices, search and install **Foscam Viewer** on APP Store for iOS devices.

If you would like to read more details on the Android APP or iOS APP, Please refer to the *Android APP User Manual* or *iOS App User Manual*.

7 Appendix

7.1 Frequently Asked Questions

7.1.1 Install the ActiveX of Firefox browser, Google Chrome and IE Chrome.

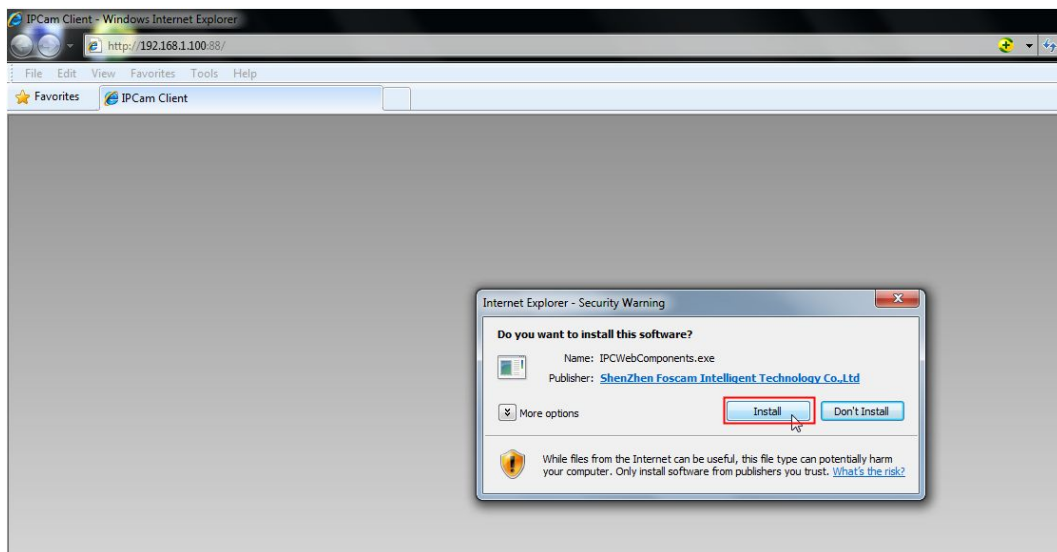


Figure 7.1

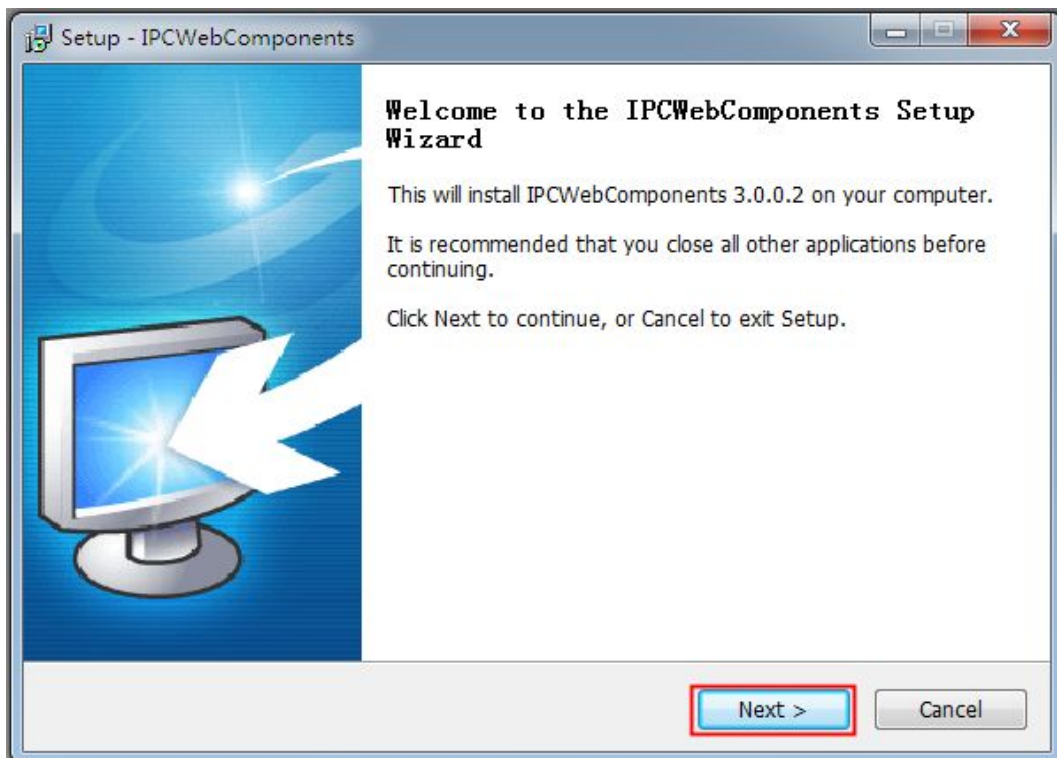


Figure 7.2

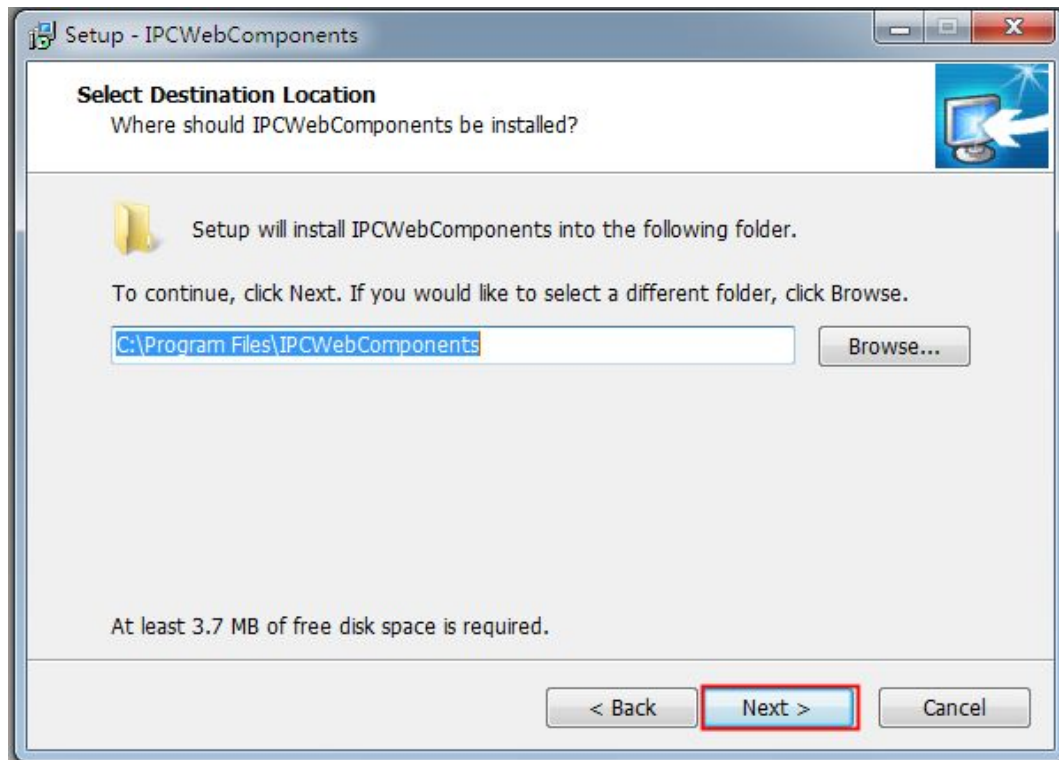


Figure 7.3

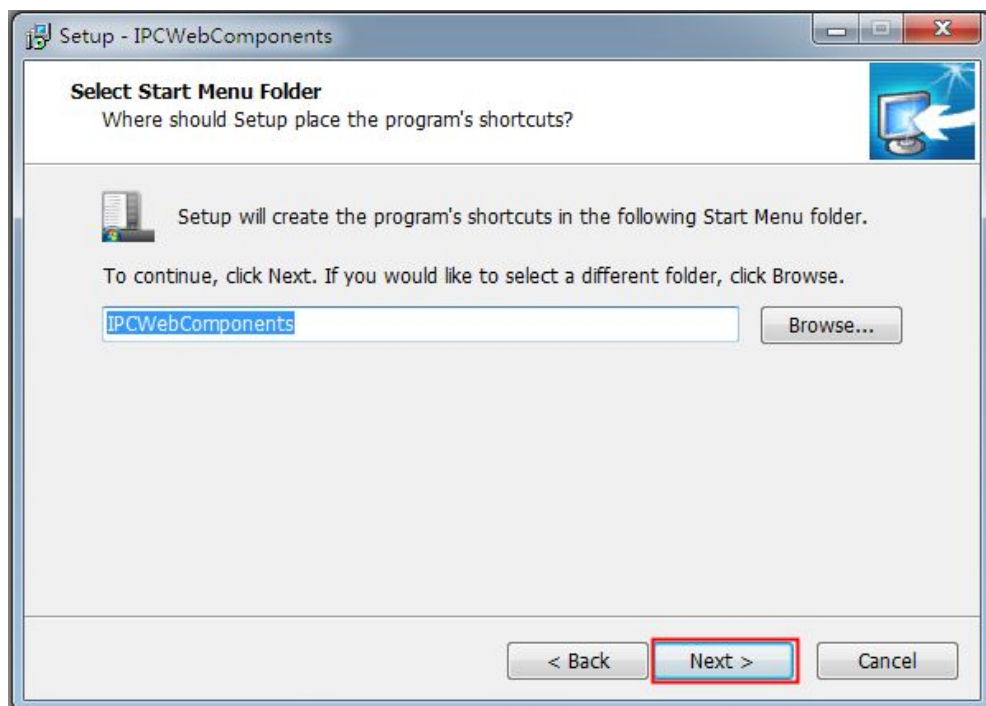


Figure 7.4

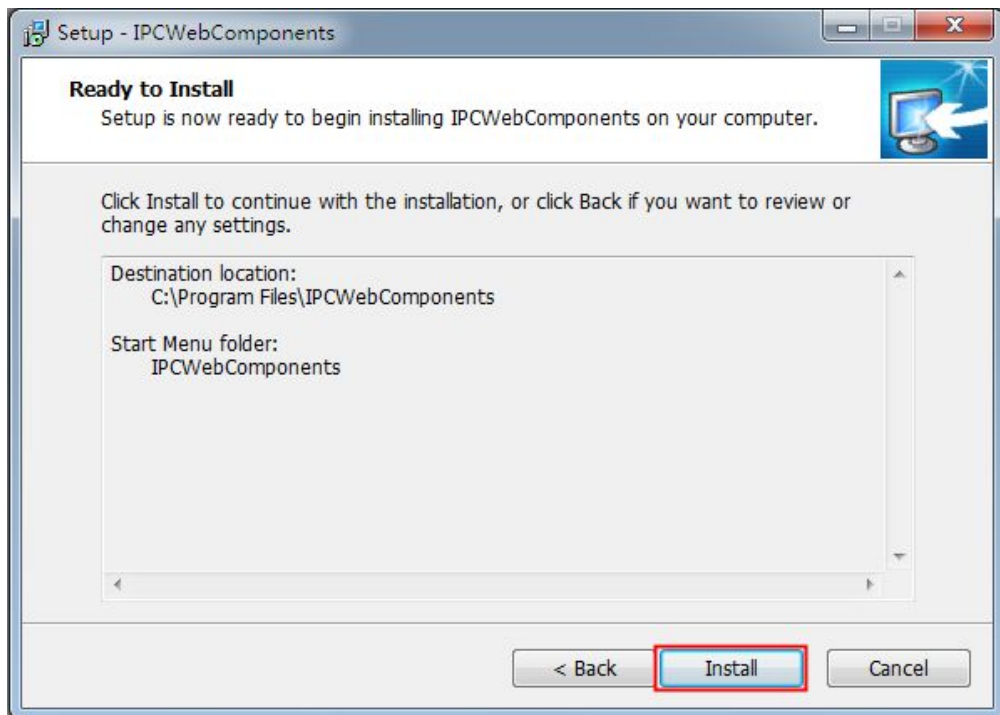


Figure 7.5

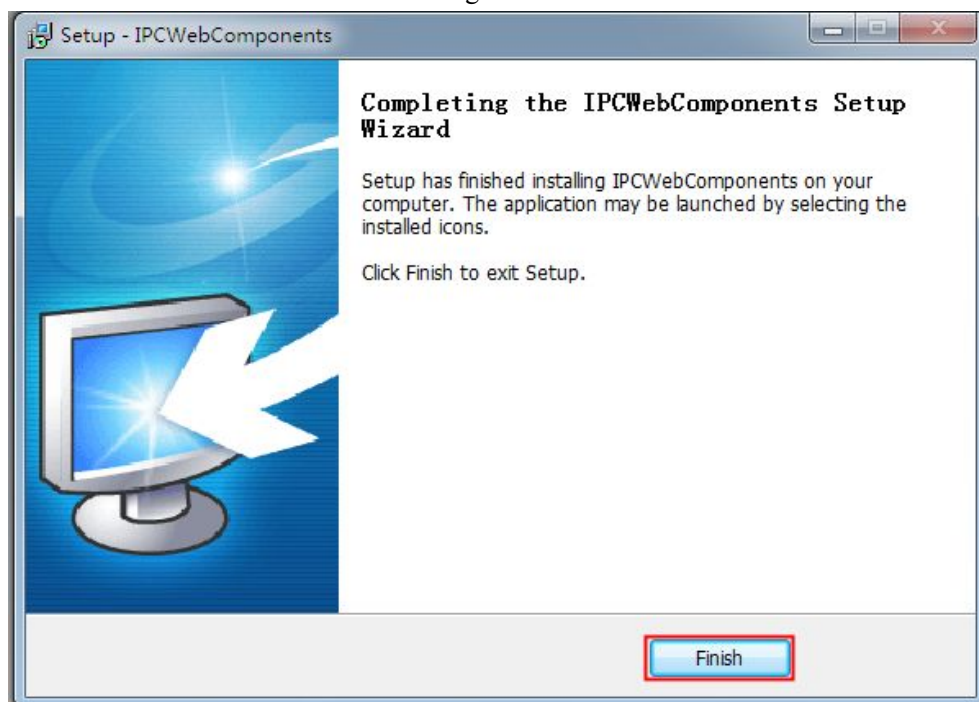


Figure 7.6

7.1.2 Uninstall the ActiveX of Firefox browser, Google Chrome and IE Chrome.

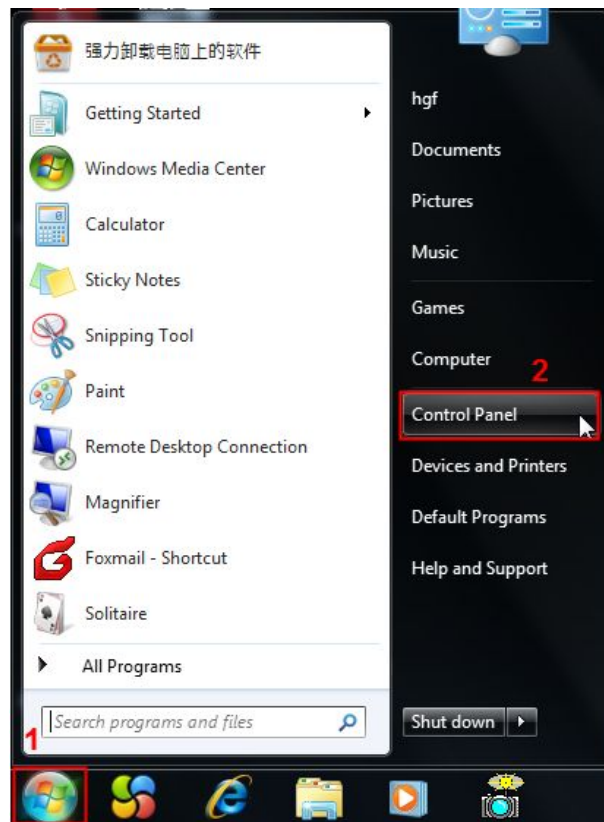


Figure 7.7



Figure 7.8

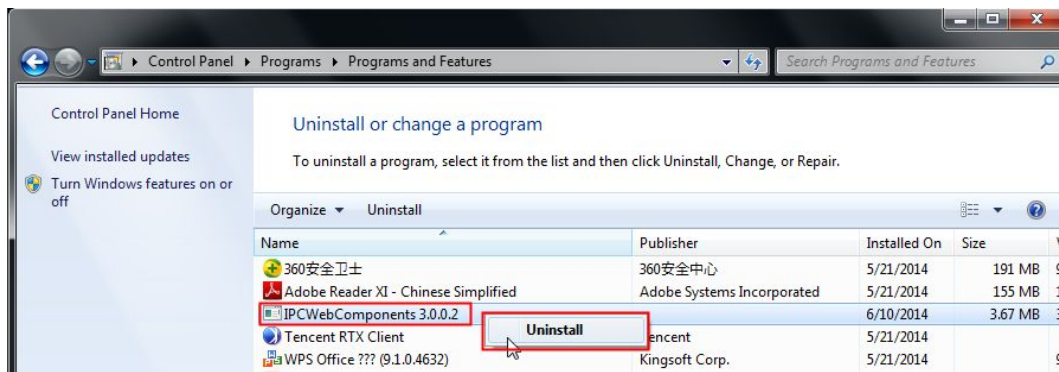


Figure 7.9

7.1.3 I have forgotten the administrator password

To reset the administrator password, you had better unplug the network cable firstly. After that, press and hold down the RESET BUTTON about 5 seconds. Releasing the reset button, the password will turn to the factory default.

Default administrator username/password: **admin with blank password**

7.1.4 Subnet doesn't match

Check whether your ipcamera in the same subnet of your computer. The step is **Control Panel→Network Connections→Dbclick Local Area Connections → Choose General→Properties.**

Check subnet mask, IP address and gateways. When you set IP address please make sure they are in the same subnet. Otherwise you can't access camera.

7.1.5 Camera can not record

Camera can not record when I click Record button or I can't change the manually record path.

When you use Windows7 or Vista, you may be not able to do manually record or change the record path because of the security settings of computer.

There are two ways to resolve this problem:

- (1) Please add the camera as a trusted site to resolve this issue. The steps are
IE browser→Tool→Internet Properties→Security→Trusted sites→Sites→Add
- (2) Open IE browser, then right click, select "Run as administrator"

7.1.6 No Pictures Problems

The video streaming is transmitted by the ActiveX controller. If ActiveX controller isn't installed correctly you will see no video image. You can resolve this problem by this way:

Download ActiveX controller and set the safety property of IE in the PC when you view it first time: IE browser→Tool→Internet Proper→Security→Custom Level→ActiveX control and Plug-ins. Three options of

front should be set to be “Enable”, The ActiveX programs read by the computer will be stored. As follows:

Enable: Download unsigned ActiveX controls

Enable: Initialize and script ActiveX controls not marked as safe

Enable: Run ActiveX controls and plug-ins

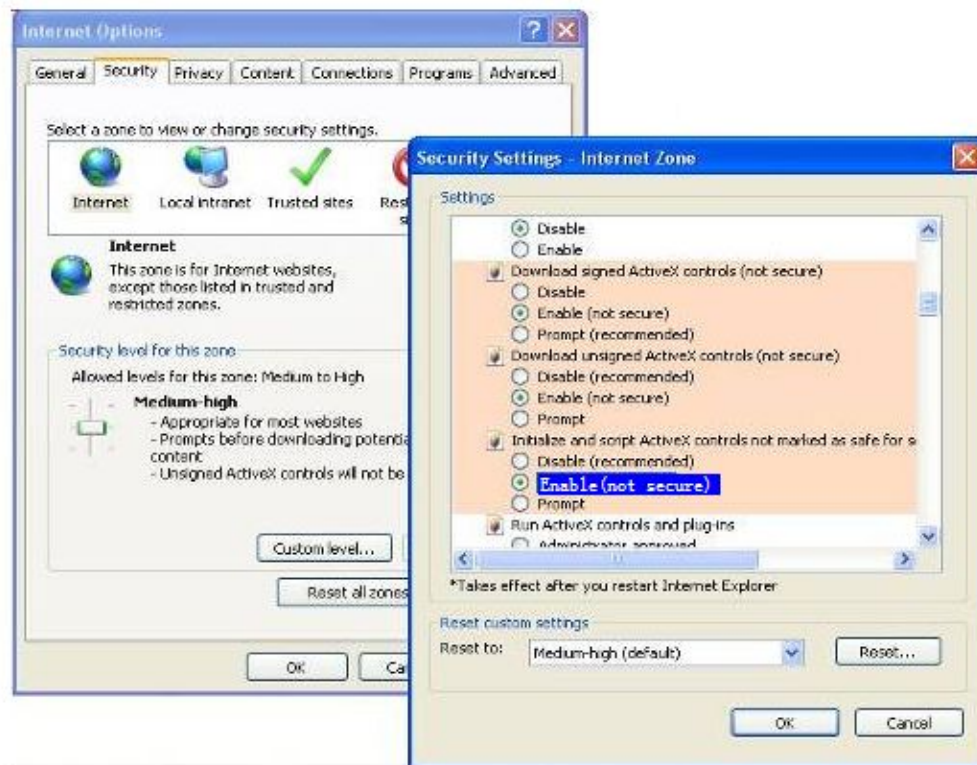


Figure 7.10

If you allow the ActiveX running, but still could not see living video. Please change another port number to try. Don't use port 8000.

		Save	Refresh
HTTP Port	88		
Media Port	88		
HTTPS Port	443		

Figure 7.11

NOTE: Make sure that your firewall or anti-virus software does not block the camera or ActiveX. If you could not see video, please shut down firewall or anti-virus software to try again.

7.1.7 Can't access IP camera in internet

There are some reasons:

- 1 ActiveX controller is not installed correctly
- 2 The port which camera used is blocked by Firewall or Anti-virus software. Please change another port number and try again.
- 3 Port forwarding is not successful.

Check these settings and make sure they are correct.

7.1.8 UPnP always failed

UPnP only contains port forwarding in our recent software. Sometimes, it may be failed to do port forwarding automatically because of firewall or anti-virus software. It also has much relation with router's security settings. So we recommend you do port forwarding manually. You can view your camera in internet successfully after you do port forwarding manually in your router.

7.2 Default Parameters

Default network Parameters

IP address: obtain dynamically

Subnet mask: obtain dynamically

Gateway: obtain dynamically

DDNS: Embedded FOSCAM DDNS Service

Username and password

Default username is admin with a blank password

7.3 Specification

ITEMS		FI9853EP
Image Sensor	Sensor	High Definition Color CMOS Sensor
	Display Resolution	1280 x 720 (1.0M Pixels)
	Min. Illumination	0 Lux (With IR Illuminator)
Lens	Lens Type	Glass Lens
	focal length	f:2.8mm
	Aperture	F1.2
	Angle of View	70°
Video	Image Compression	H.264
	Image Frame Rate	30fps(60Hz), 25fps(50Hz), downward adjustable
	Resolution	720P(1280 x 720), VGA(640 x 480), QVGA(320 x 240)
	Stream	dual stream
	Image adjustment	The hue, brightness, contrast, saturation, sharpness are adjustable
	Flip image	flip and mirror
	Infrared mode	Automatic or manual
	Night visibility	With 1 Infrared Lamp Array, Night Vision Range up to 20m
	Ethernet	One 10/100Mbps RJ45 port

Network	Network Protocol	IP、TCP、UDP、HTTP、HTTPS、SMTP、FTP、DHCP、DDNS、UPnP、RTSP、ONVIF
System Requirements	Operating System	Microsoft Windows 2000/XP, Vista, 7,8; Mac OS
	Browser	Microsoft IE6 and above version or compatible browser; Mozilla Firefox; Google Chrome; Apple Safari.
Other Features	Motion Detection	Alarm via E-Mail, upload alarm snapshot to FTP
	Privacy Block	Set privacy area manually
	User Accounts	Three levels user role
	Firewall	Supports IP Filtering
	Reset	Reset button is available
Power	Power Supply	DC 12V/1.0A;PoE (802.3af)
	Power Consumption	4.2 Watts (Max.)
Physical	Dimension(LxWxH)	135(L)x135(W)x98(H)
	Net Weight	560g
Environment	Operating Temperature	-20° ~ 55°C (-4°F ~ 131°F)
	Operating Humidity	10% ~ 80% non-condensing
	Storage Temperature	-20°C ~ 60° (-4°F ~ 140°F)
	Storage Humidity	0% ~ 90% non-condensing
Certification	CE, FCC, RoHS	
Warranty	Limited 1-year warranty	

7.4 CE & FCC

Electromagnetic Compatibility (EMC)

FCC Statement



This device complies with FCC Rules Part 15. Operation is subject to the following two conditions.

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the installation

manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is like to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

FCC Caution

Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

CE Mark Warning



This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

8 Obtaining Technical Support

While we hope your experience with the IPCAM network camera is enjoyable and easy to use, you may experience some issues or have questions that this User's Guide has not answered.

Please contact support via e-mail at support@foscam.us. You can also reach technical support at **1-800-930-0949** by following the automated instructions.

